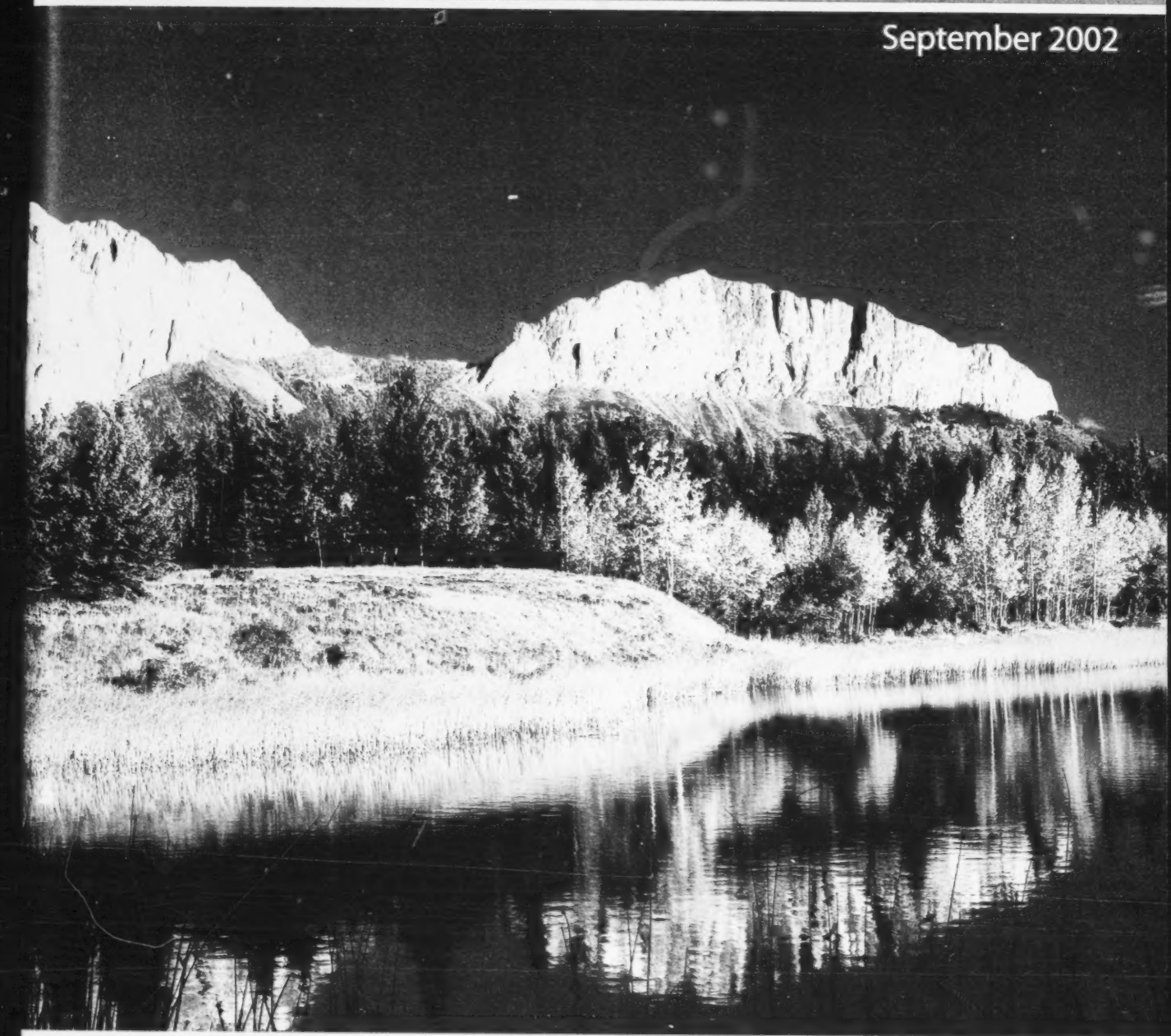
Bow Valley Protected Areas Management Plan

September 2002



Alberta
COMMUNITY DEVELOPMENT
Parks & Protected Areas

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BOW VALLEY PROTECTED AREAS

MANAGEMENT PLAN

September, 2002

Alberta

COMMUNITY DEVELOPMENT

Parks & Protected Areas

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OVERALL MANAGEMENT OF BOW VALLEY PROTECTED AREAS

1.0 INTRODUCTION

1.1 Background

The Bow Valley protected areas are public lands designated under the *Provincial Parks Act* to be maintained in a natural state for use by the public for recreation, education or other specified purposes. They include Bow Valley Wildland Park, Canmore Nordic Centre Provincial Park and Bow Valley Provincial Park. (see Map 1 for locations).

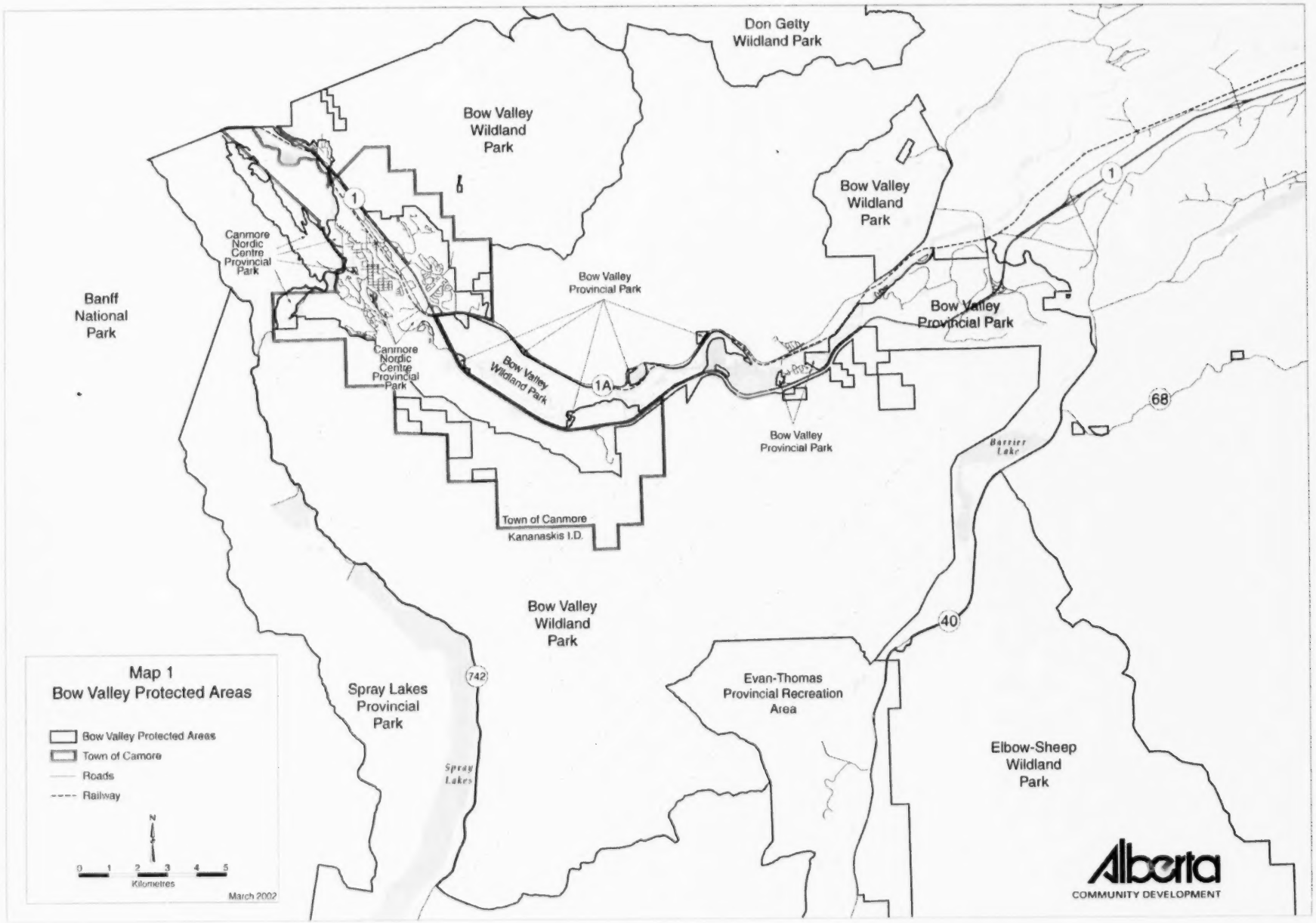
The Bow Valley protected areas were designated or expanded by Order in Council under the province's Special Places program in 1998. The designations reflected the consensus of a volunteer Local Committee that included conservation groups, industry, recreationists and local governments. From 1998 to September 2000, the Bow Valley protected areas covered an area of 75,408 acres (30,517 hectares) of provincial crown land in the Bow River watershed. In September 2000, a further 20, 474 acres (8289 hectares) in the Spray Valley was added to the Bow Valley Wildland Park. Together, these protected areas occupy a significant proportion of the provincial crown lands in the Bow and Spray Valleys (see map 1) and have high ecological, scenic and recreational values.

While developing the draft plan, the redesignation of most of Bow Flats and all of Yamnuska Natural Areas to become parts of the Bow Valley Wildland Park was supported by neighbouring jurisdictions, stakeholders and the public and is reflected in the final plan. Similarly, those portions of the former Bow Flats Natural Area upstream of the Trans Canada Highway bridge are added to the Canmore Nordic Centre Provincial Park and small portions of the former Bow Flats Natural Area downstream of Lac des Arcs subdivision are added to Bow Valley Provincial Park. As well, the six small Provincial Recreation Areas along the Trans Canada and 1A Highways are added to Bow Valley Provincial Park.

Several relatively minor boundary amendments to the Bow Valley Wildland Park and one to the Canmore Nordic Centre Provincial Park are shown in this plan. These are consistent with the recommendations of the Bow Valley Special Places Local Committee and most were intended to make the Wildland Park boundary consistent with existing dispositions (e.g., quarry, teahouse) that are surrounded by the Wildland Park (see Map 2). As well, several adjacent parcels of vacant provincial crown land have been added where their management intent and objectives are consistent with that of the Wildland Park (this includes the 400-acre "Letter of Intent" lands formerly associated with the SilverTip development). The addition of lands around Grassi Lakes to the Canmore Nordic Centre Provincial Park occurred for the same general reason.

1.2 Significant Features

The Bow Valley protected areas offer high scenic quality, a high degree of vegetation and wildlife diversity, good quality recreation and environmental education opportunities. Alpine, subalpine and montane zones are represented. These protected areas include several important wildlife and fish habitat areas (e.g., Wind Ridge, Bow River floodplain), as well as important local and regional movement corridors for wildlife. The proximity of these protected areas to the Trans Canada Highway, the transcontinental railway, the towns of Canmore and Banff, several important mineral extraction and processing facilities and the nearby City of Calgary is also a significant factor in determining appropriate management direction.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Bow Valley Protected Areas
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March 2002
Alberta
COMMUNITY DEVELOPMENT

1.3 Purpose and Scope of Management Plan

Following the designation of new protected areas, management plans are prepared to ensure desired management objectives are met on the designated land base.

While the Provincial Parks Act provides legislative authority only for lands within designated protected areas, the plan also addresses the management of issues that go beyond the boundaries of any one of the protected areas. Wildlife movement and wildfire hazard reductions are examples. Effective management of these trans boundary issues and concerns requires the establishment and maintenance of appropriate mechanisms for communication and co-ordination between adjacent jurisdictions. Each jurisdiction retains its own rights and authorities and the various portions of provincial crown land are managed under their applicable legislation, policies and regulations. However, effective management also depends on maintaining good working relationships among jurisdictions, stakeholders and visitors.

The plan guides management of these protected areas consistent with legislation and policies that are in effect as well as stakeholder and public opinion. Recommendations made by the Special Places Local Committee have been carefully considered. The plan provides statements of management intent and objectives for each individual protected area (see sections following) as well as this more general, overall section. In addition, for each individual protected area, the plan provides a brief description of natural and cultural features. It also defines allowed and prohibited activities and presents zoning as well as management actions or guidelines. Where insufficient information exists to satisfy certain management objectives, an action plan to address this gap will be recommended. Existing jurisdictional roles and boundaries will be respected and Kananaskis Country policies and directives will be maintained. The management plan will promote proper integration and co-ordination across jurisdictional and protected area boundaries.

2.0 ROLE IN ALBERTA'S NETWORK OF PROTECTED AREAS

2.1 Legislation and Classification

The *Provincial Parks Act* is the legislative authority for the establishment and management of **Provincial Parks** and **Wildland Parks** in the Bow Valley. These categories of protected area have different management intents, objectives and guidelines (see Appendix 1 for description) and are presented in more detail in sections B, C and D of this plan.

During this management plan process, stakeholders and the public supported the redesignation of most of Bow Flats and all of Yamnuska Natural Areas and the addition of these lands to the Bow Valley Wildland Park. The overall management intent of these areas is consistent with that of the Wildland Park and would permit enforceable regulations to come into effect immediately for these areas. Given their importance for wildlife and fisheries management, outdoor recreation plus their proximity and accessibility to growing numbers of people in the region, it is essential to have enforceable regulations in place for the protection and use of these areas. Establishing such regulations under the Act governing Natural Areas was not possible at this time. Amalgamating these lands with the larger Wildland Park will also assist in communicating with stakeholders and visitors by simplifying management messages. The addition of portions of the former Bow Flats Natural Area to the Canmore Nordic Centre or Bow Valley provincial parks was done for the same reasons (see Maps 5 and 7).

Further, the redesignation of six small Provincial Recreation Areas located along the Trans Canada Highway and Highway 1A as parts of Bow Valley Provincial Park was also supported and will be implemented. This redesignation will consolidate management of these areas with that of the nearby park. Neither the existing operating agreement nor uses of the sites will be affected by this change.

2.2 System Objectives

The following four broad program objectives are the cornerstones of Alberta's network of protected areas. They apply to differing degrees in each of the different categories of protected areas throughout the province. Management objectives specific to each protected area as well as overall management objectives are presented in the following sections of the plan.

Preservation

To preserve and protect in perpetuity a system of representative, special and outstanding natural landscapes and features as well as landscape-related prehistoric, historic and cultural resources of Alberta.

Heritage Appreciation

To provide opportunities to explore, understand and appreciate the natural, historical and cultural heritage of Alberta, and to enhance public awareness of our natural environment and our relationship to and dependence on it.

Outdoor Recreation

To provide a variety of intensive and dispersed outdoor recreation opportunities and related facilities and services.

Tourism

To encourage residents and visitors to discover and enjoy the natural, historical and cultural resources of the province through a variety of recreation opportunities, facilities and accommodation services.

2.3 Natural Regions Framework

The Bow Valley protected areas were established or amended as part of Special Places, the Government of Alberta's protected areas program. The program vision was to complete a network of protected areas that represent the environmental diversity of the province's six Natural Regions and twenty subregions as a natural legacy for future generations. (see www.cd.gov.ab.ca website for a detailed description of these). The Bow Valley protected areas are located mainly in the Rocky Mountain Natural Region and include areas representing Alpine, Subalpine and Montane subregions. The montane subregion, which is provincially significant because of its biodiversity, wildlife habitat and scenic values, is represented in Bow Valley Provincial Park, Bow Valley Wildland Park and Canmore Nordic Centre Provincial Park.

2.4 Natural History Themes

Protected areas are evaluated for representativeness and/or uniqueness based on the Natural Regions and subregions framework and also on a more detailed evaluation of Natural History Themes. Themes are the more detailed natural characteristics of an area such as landforms and forest types or plant communities that help to evaluate how representative or unique that area is. The rationale for and a complete description of these themes for all provincial regions is contained in "Natural Regions, Subregions and Natural History Themes of Alberta, A Classification for Protected Area Management" Alberta Environmental Protection, December 1994, which is included in the List of References. Those themes that are found within the Bow Valley protected areas are listed in Appendix C.

2.5 Guiding Principles

Alberta Community Development manages the provincial parks and protected areas system in a way that protects and maintains natural, cultural and recreational values for the benefit and enjoyment of all Albertans.

Besides these more general goals and principles, an ecosystem-based management approach will be applied in the Bow Valley protected areas. This approach calls for establishing and maintaining common goals and positive long term working relationships among land managers, stakeholders, neighbouring jurisdictions and visitors. It is based on the best available information and seeks to integrate biological, physical and social information. The goal is to strike the right balance between protection and use in a given protected area and the broader regional landscape. This ecosystem-based approach is often characterized as follows:

- Ecosystems extend beyond protected area boundaries. While management on neighbouring lands may affect wildlife, air, water, and vegetation within a protected area, likewise management within a protected area may affect adjacent lands. Ensuring good communication and co-ordination among land managers, stakeholders including neighbouring jurisdictions is essential. For example, the management of the Bow Valley protected areas must be coordinated with plans of the local municipalities, the Bow Corridor, Ghost and Kananaskis Country Integrated Resource plans. Those portions of Bow Valley protected areas within Kananaskis Country must be consistent with the Kananaskis Country Recreation Policy (1999) and other policies in effect.

- People are a fundamental part of the ecosystem. Inside protected areas, high quality recreation and tourism opportunities will be provided while protecting ecological and cultural heritage values. Understanding the relationship between people and the environment is the foundation of good management decisions.

- The traditional relationship of Alberta's aboriginal peoples to the land is a source of inspiration and understanding.

- Decisions are based on the best available ecological, cultural, economic and social information.

- Consulting and working with visitors, residents, businesses and other government agencies is a key component in maintaining ecological integrity, protecting our cultural heritage and offering opportunities to enjoy quality experiences.

- Providing high quality volunteer opportunities as well as visitor information, interpretation and environmental educational programs is essential.

- Natural processes, and, where appropriate, technology will be used to maintain or restore healthy ecosystems.

- Efforts will be made to establish more precise monitoring targets or indicator species by supporting ongoing research activities.

2.6 Zoning

Consistent with the management intent and objectives for the various Bow Valley protected areas and in order to strike the appropriate balance between resource protection and use in different areas, a protected area zoning scheme has been applied. This scheme is described in Appendix 2. It includes seven zones of which five have been applied in the Bow Valley protected areas. The zones recognize the differences in resource values as well as visitor use and landscape capability in different parts of the protected areas. The details of proposed zoning for each individual protected area are presented in the appropriate sections of the plan.

3.0 OVERVIEW OF BOW VALLEY PROTECTED AREAS

The Bow Valley protected areas are located in the Bow, Kananaskis and Spray Valleys near the eastern edge of the Rocky Mountains. Banff National Park lies to the west, the Stoney Indian Reserve to the east

(see map 1), the Ghost River watershed lies to the north while the southern portion overlaps with Kananaskis Country. The elevations in this part of the Front Ranges of the Rocky Mountains vary from 1300 m to over 3100 m at the highest peaks. High, rugged cliffs, peaks and ridges composed of limestones, dolomites and sandstones predominate. The main landforms of the lower slopes include colluvium, terraces and morainal features. The mostly broad flood plain of the Bow River occupies the valley bottom. The diverse slopes and aspects of the protected areas along with prevailing winds, sunshine and moisture regimes create diverse vegetative and faunal habitats as well as high scenic qualities. There are several significant prehistoric sites present which indicate that First Nations people have occupied the Bow Valley for about 11,000 years (Downing et al, 1989).

The Bow Valley serves as a major national transportation corridor including the Trans Canada Highway, Highway 1A and the CPR mainline. Mineral extraction and processing activities as well as several quarries make an important contribution to the local and provincial economy. The Town of Canmore has been growing rapidly as a residential and tourism service centre. Other hamlets or facilities that are either located within or have a direct influence on the Bow Valley protected areas include Exshaw, Dead Man's Flats, Lac des Arcs and Harvie Heights, the Canmore Nordic Centre (year-round trail competition and recreation), campgrounds and day use sites within Bow Valley Provincial Park and along the two highways and many formal and informal trails throughout the Bow Valley. The Spray Valley portion of the Wildland Park has few facilities and receives less use. The high level of facility development and public use in the Kananaskis Valley also influence the Wildland Park and Bow Valley Provincial Park. The City of Calgary continues to grow and is approximately one hour's drive from these protected areas.

4.0 OVERALL MANAGEMENT INTENT AND OBJECTIVES

The **OVERALL management intent** for the Bow Valley protected areas is:

To ensure protection or enhancement of ecological integrity and biodiversity while maintaining opportunities for public recreation.

The **OVERALL management objectives** for all of the Bow Valley protected areas are:

1. To maintain viable local and regional wildlife populations through the protection and/or enhancement of existing wildlife, riparian and aquatic habitat and especially the effectiveness of movement corridors and habitat patches for (species including) large carnivores.

2. To protect important historic and prehistoric resources

3. To maintain or enhance opportunities for outdoor recreation, tourism and heritage appreciation including maintenance of high scenic values.

4. To address public safety concerns (e.g., wildfire hazard reduction, flood control, avalanche control) while recognizing the overall management intent.

5. To maintain or enhance regional (inter-jurisdictional) co-ordination of planning, management and research activities.

5.0 MANAGEMENT GUIDELINES

The following guidelines will direct a variety of uses, issues and activities while reducing problems or conflicts in all Bow Valley protected areas.

5.1 Preservation

5.1.1 Wildlife Corridors and Habitat Protection

In view of increasing development and human activity in the Bow Valley, for example those identified in the Natural Resources Conservation Board (NRCB) decision regarding the Three Sisters project, the importance of protecting remaining wildlife movement corridors and habitat patches in the Bow Valley became a matter of priority. With several different jurisdictions involved, it was necessary to establish effective communication and co-ordination to maintain habitat and movement corridors and to share in research efforts.

The Bow Corridor Ecosystem Advisory Group (BCEAG) was formed in 1995 as a partnership involving the Municipal District of Bighorn, Town of Canmore, Town of Banff, Banff National Park and the provincial government. The group has coordinated research into wildlife corridors and habitat areas and recommended a variety of protective measures be taken by member jurisdictions (ref. "Wildlife Corridor and Habitat Patch Guidelines for the Bow Valley", rev. July 1996 and "Guidelines for Human Use within Wildlife Corridors and Habitat Patches in the Bow Valley", August 1999). These include restrictions on development and use of remaining wildlife corridors or key habitat areas. Many of these corridors and habitat patches occur within the various Bow Valley protected areas. As well, BCEAG has produced a report entitled "Education and Implementation Recommendations for Managing Human Use within Wildlife Corridors and Habitat Patches in the Bow Valley" (Sept. 2001). These are intended to provide member jurisdictions with a co-ordinated approach to public education and implementation of human use guidelines. This management plan is a way to implement these guidelines and measures within protected area boundaries. Where appropriate, corridors or patches have been zoned "Preservation". Guidelines for each zone have been prepared which include those recommended by BCEAG plus some additional ones that, for example, restrict camping or fires. Another regulation that will affect use of these zones and all parts of the Bow Valley protected areas is that which requires dogs to be leashed at all times. Specific restrictions on trail or other facility development as well as seasonal restrictions on trail use are described for each individual protected area or each "preservation" zone in the following sections of this plan.

Alberta Community Development will continue to work with neighbouring jurisdictions, private landowners and other stakeholders to implement the "Guidelines for Human Use Within Wildlife Corridors and Habitat Patches in the Bow Valley" (BCEAG, Aug. 1999) as well as the "Education and Implementation Recommendations for Managing Human Use Within Wildlife Corridors and Habitat Patches in the Bow Valley, Banff National Park to Seebe" (BCEAG, Sept. 2001). Alberta Community Development will also work with trail users and other stakeholders to plan and manage a variety of high quality, safe and enjoyable trail experiences in the Bow Valley.

The importance of the Bow River and Bill Griffiths Creek for fish habitat makes it imperative that they are protected from activities which could possibly affect the water quality or quantity or alter, disturb or destroy fish habitat. Permits will continue to be required for all work on the banks or bed of streams and for any withdrawals or discharge. Water quality monitoring will continue on important streams such as the Bow River, Bill Griffiths, Policeman and Spring Creeks. The fish management process will continue following the Alberta Fish Conservation Strategy and the regulations which support this Strategy.

5.1.2 Vegetation Management

Selective habitat alterations may be carried out in order to enhance specific habitat requirements or biodiversity as well as address public safety or conflict concerns. To date, there has been limited habitat manipulation within the Bow Valley protected areas. Future opportunities will be considered where there would be no significant impacts on threatened, rare or endangered species and fragile or limited natural communities or features. Selective tree removal is one tool used for habitat enhancement and could be carried out following careful evaluation and plan preparation. Research will be undertaken to determine whether prescribed fire might be an effective and safe tool to use in vegetation management in these protected areas.

Restricted and invasive weeds will be monitored, controlled and removed as required by provincial legislation. The use of herbicides will be kept to a minimum with mechanical control being the option of choice where practical.

If an infestation of insects and/or diseases threatens adjacent natural resources or other important features, the affected trees will be removed to control the spread of infestation. Selective tree removal may also be considered for fire hazard reduction or habitat management programs. The method of removal would minimize impacts on the protected area and consider aesthetics. All such activities and conditions will be subject to approval by the department and require a permit issued by Land and Forest Division.

5.1.3 Reclamation

Disturbed areas consist mainly of old trails or roads and heavily used random campsites. All old trails will either be closed to unauthorized vehicle use and allowed to revert to their natural condition or designated as trails for public use. The area will be monitored for damage such as erosion, rutting and compaction. If damage occurs, reclamation or further restrictions on use could occur. When reclaiming areas, natural materials and native species will be used wherever possible. Where non-native species are used for erosion control or to enhance re-establishment of native species, only non-invasive, non-persistent species will be used.

5.1.4 Prehistoric and Historic Resources

Several known archaeological sites are present within the various Bow Valley protected areas and considerable potential exists to find others. The Alberta Historic Resources Act provides the overall authority to protect archaeological features. The most significant known prehistoric features are rock paintings in Grotto Canyon and near Grassi Lakes. The Grassi Lakes paintings are among the best-preserved examples of rock art in this part of the province. Other prehistoric features include remains of campsites and a bison kill site just west of Bow Valley Provincial Park along the Bow River. Within protected areas, the Provincial Parks Act provides the authority to protect known sites, to develop interpretive or other facilities/programs to inform and educate visitors about this aspect of local history. While no further major recreation facility is planned for these protected areas, any future facility development will be preceded by an historic resources assessment as required by the Historical Resources Act. Further archaeological or historical research will be encouraged as long as the impacts of excavations or related activities do not impact important natural resource features. The condition of known sites will be monitored. Where feasible, information about them will be made available to visitors. Effective measures will be taken to protect known sites.

5.2 Outdoor Recreation

One of the objectives of the Bow Valley protected areas is to maintain or enhance opportunities for outdoor recreation. Existing opportunities include wildlife viewing, hiking, mountain biking, horse riding, rock and ice climbing, fishing, hunting, paddling sports, caving, camping, cross country skiing, snowshoeing, orienteering, dog sledding and other non motorized activities. The importance of establishing and maintaining good trail facilities for recreation and tourism is recognised.

These activities will continue subject to appropriate measures designed to meet resource management objectives while maintaining public safety and enjoyment. Alberta Community Development will work with neighbouring jurisdictions, stakeholders and visitors to plan, develop and maintain a high quality system of recreational trail opportunities in the valley. Where trail use restrictions are necessary, visitors will be directed to alternate areas nearby.

Other measures include a requirement for permits for group use or special events. These are issued under the authority of the Provincial Parks Act and consistent with the "Kananaskis Country Special Events Guidelines, December 2000". Permit conditions are designed to minimize impacts and conflicts

with other users and are issued by Alberta Community Development. The department will work co-operatively with neighbouring jurisdictions and stakeholders to establish and maintain adequate, safe trailhead parking areas and minimize negative effects or conflicts across boundaries.

Alberta Community Development will work with others in the Bow Valley to maintain or enhance the high scenic quality, improve air quality and manage noise as these directly affect the quality of recreational experiences in Bow Valley protected areas.

5.3 Heritage Appreciation

A variety of interpretive, information and educational services and materials about the Bow Valley protected areas are available. The Barrier Visitor Centre along with the Bow Valley park office, Canmore Nordic Centre and Canmore Provincial Building office will continue to provide maps, brochures and other products. These materials and services will continue to be provided and a Kananaskis Country website will be maintained. The existing co-operating agreement with the Friends of Kananaskis Country will be maintained. The existing educational partnership between Alberta Community Development and a variety of school boards and related groups will continue to be developed. Permits for educational group use within protected areas will continue to be issued. Public education about managing human use in protected areas will occur through use of signs, media and presentations to school or other groups, etc.

The long relationship of the Nakoda and other First Nations with the Bow Valley is recognized. Traditional activities such as ceremonies, hunting, trapping and gathering continue to be carried out and, where appropriate, stories about local natural features or past events will be included in heritage appreciation programming.

5.4 Tourism

The importance of maintaining a spectacular and high quality natural environment as well as providing a range of recreation opportunities is recognised. Alberta Community Development will continue to work with local tourism organizations and operators, filming groups and others to ensure continued access to such opportunities while maintaining a high quality natural environment.

Guidelines for managing commercial outfitters and guides, filming and other commercial tourism activities include requirements for a permit issued under the Provincial Parks Act.

Helicopter tourism has become a significant activity around the Bow Valley protected areas. It is managed primarily through an agreement between the existing helicopter company and Alberta Community Development as well as regulations pursuant to the Provincial Parks Act. The "Voluntary Helicopter Guidelines" agreement identifies sensitive locations and times within the region as well as more suitable flight paths and landing locations. Specific landing locations are identified in the Wildland Park section of this plan.

5.5 Public Safety

5.5.1 Wildfire Hazard Reduction

While wildfire is considered a natural disturbance process in Alberta, it is highly unpredictable and catastrophic wildfire may threaten human safety and development. Consequently all wildfires within the Bow Valley protected areas will be actioned according to provincial wildfire suppression policy. Consideration could be given to allowing escaped minor wildfires to burn under appropriate conditions provided that there is an approved fire management plan for the area supporting such action.

Fuel modification programs may be used in and adjacent to developed areas to reduce the risk of catastrophic fire and improve fire suppression efforts by thinning the canopy and reducing ladder fuels. Prescribed fire and logging may be used in certain areas to simulate natural disturbance by wildfire where development or other factors have prevented or minimized the likelihood of stand-renewing wildfire. The

Firesmart program will continue to be used to promote awareness of wildfire hazards and appropriate actions that property owners may undertake to reduce these

5.5.2 Problem Wildlife

Management of problem wildlife-human conflict situations will be dealt with in accordance with existing procedures. Trail or area closures and selective vegetation alteration may be used to reduce conflict, public safety and impact concerns. Continued research to better define and protect both wildlife and public safety will be done as resources permit.

5.5.3 Flooding

Periodic flooding of the Bow River and its tributaries affects portions of the Wildland Park and Bow Valley Provincial Park. Within Bow Valley Wildland Park and Bow Valley Provincial Park, flood protection measures consist of berms along the north bank of the Bow River just above the Trans Canada Highway bridge as well as rock groynes at Bow River Campground and rip rap at Whitefish Day Use site in Bow Valley Provincial Park. The berms help protect the highway and bridge works and are maintained by Alberta Transportation. The rock groynes and riprap at Bow River Campground and Whitefish are designed to protect the riverbank and adjacent recreation facilities from ongoing erosion. Any proposals to alter or expand these flood or erosion protection features will ensure that disturbance to the protected areas and aquatic habitat will be minimized.

Wherever possible, the flooding of protected area lands in the Bow Valley will be regarded as part of the natural ecosystem. Any future facilities developed in these protected areas will conform to the Flood Damage Reduction Program guidelines. The government will continue to work with adjacent municipalities and other partners in the valley to ensure that any future flood protection measures undertaken in the vicinity will have no or minimal effects on nearby protected areas.

5.5.4 Avalanche

Avalanches are natural disturbances that affect public safety and property within or near the Bow Valley Wildland Park and the Canmore Nordic Centre Provincial Park. Government staff monitors avalanche hazard levels in these locations, providing regular updates to the Canadian Avalanche Centre's public information system and issuing avalanche advisories when appropriate. This assists backcountry travellers to make informed decisions and minimize the risk of avalanche during their activities. Hazard levels along the Smith Dorrien Spray Trail, which passes through the Wildland Park above the Town of Canmore are monitored and, where required, trained staff conduct blasting or other control work in conjunction with road maintenance contractors and the RCMP. This monitoring, reporting and control work will continue.

6.0 IMPLEMENTATION OF PLAN

6.1 Roles

6.1.1 Alberta Community Development

The co-ordination of plan implementation and day-to-day management of the protected areas is the responsibility of Parks and Protected Areas Division of Alberta Community Development. Roles include administration, planning, information/education, facility development, maintenance and enforcement. Co-operative and effective working relationships with neighbouring jurisdictions, visitors and stakeholders will continue to be developed.

Emergency search and rescue services will continue to be provided by trained staff working in conjunction with the RCMP. Periodic plan reviews or updates will be undertaken either as new information becomes available or as the need arises.

6.1.2 Volunteers

Individuals or groups will be invited to assume a variety of volunteer responsibilities including stakeholder representation on planning advisory groups, protected area stewards or trail maintenance through the Friends of Kananaskis Country Trail Care Group. Management of volunteers will conform to the standards set out by the Department's Volunteer Program. Volunteer stewards will assist departmental staff in patrolling, inspecting and reporting on the conditions of the protected areas, as well as providing input to the ongoing management process. They will have no enforcement role, and will only OBSERVE, RECORD, AND REPORT. In addition, volunteers will continue to support a variety of programs such as public safety, research, monitoring, education and other departmental roles. Work with a variety of interest groups will continue and active partnerships to care for protected areas or educate and inform visitors will be encouraged.

6.2 Research

Government research priorities will include wildlife use of corridors and other habitat areas, human use patterns, effects of use and visitor satisfaction. Other research proposals will be considered, provided such activities have no significant negative impact on the site, other site users or wildlife. Off road vehicle use for research purposes will be discouraged and only allowed when shown to be necessary. Research related to the management of the site and the species found here, such as bighorn sheep or carnivores, or for the acquisition of biophysical or archaeological information to assist resource management will be given priority. Other research proposals will be considered on a case-by-case basis. A permit for research activities must be obtained from Alberta Community Development and a copy of all research results must be provided to the department. New knowledge resulting from research will be used wherever possible to benefit management.

6.3 Signage

Boundary, trailhead and other signage as required for the Bow Valley protected areas will be installed and maintained.

6.4 Dispositions

The Bow Valley protected areas include several existing (land) surface dispositions (e.g. lease, easement, Licence of Occupation) for power lines, access roads, communication towers, horse grazing, a variety of water related facilities and emergency vehicle access (see Appendix D). The management plan recognizes the existing dispositions and the rights of the disposition holders. The department will work with the disposition holders to minimize the impact of these approved land uses on these protected area lands and other users whether on the disposition or on adjacent vacant crown lands.

Freehold mineral rights exist near the mouth of the Wind Valley portion of the Wildland Park. The owners of these rights can apply to explore or develop these rights. Such an application would trigger existing review processes that would determine whether development was in the public interest.

Existing Crown mineral agreements within the Wildland Park will be honoured. These include the sandstone subsurface mineral lease below and adjacent to the Lafarge sandstone quarry in the Yamnuska area as well as the former clay pit held by Trans Alta Utilities on the north end of Barrier Dam.

Any new mineral rights that are sold within the protected areas will include a "no surface access" addendum.

6.5 Boundary Amendments

Amendments to protected area boundaries may occur from time to time to make them more consistent with an adjacent disposition boundary or to include appropriate vacant crown land with a similar management intent. Government departments, affected disposition holders and appropriate municipalities will be consulted.

BOW VALLEY WILDLAND PARK

1.0 INTRODUCTION

1.1 Background

Bow Valley Wildland Park was initially designated by Order-in-Council in 1998 and expanded in January 2001. In this management planning process, stakeholders and the public supported the redesignation of most of Bow Flats and all of Yamnuska Natural Areas to Bow Valley Wildland Park. This redesignation adds approximately 2900 hectares (7166 acres) to the existing 34,446 hectares (85,116 acres) of the Wildland Park (see Map 2).

The intent of a wildland park is to retain large areas of high quality, natural landscape where opportunities for backcountry recreation and tourism activities such as hiking, trail riding, hunting, guiding and outfitting are provided in a way that ensures the retention of the land in a natural state and minimizes interference with natural processes. Facility development will be minimized.

1.2 Significant Features

This protected area contains diverse landforms characteristic of the Rocky Mountain Natural Region. These include high ridges and cliffs alternating with shale slopes or colluvial material on lower slopes, interspersed with glaciated valleys and active river floodplains. As well, several unique and important geological features are present such as major thrust faults and fossil beds. It also contains areas of important fish and wildlife habitat and regional wildlife movement corridors as well as areas of the provincially significant montane ecoregion in the Bow Valley. It also contains the historic site of Georgetown and several significant archaeological sites. The Bow Valley Wildland Park provides scenic and accessible wildland recreation opportunities including hiking, climbing, mountain biking, equestrian and hunting opportunities.

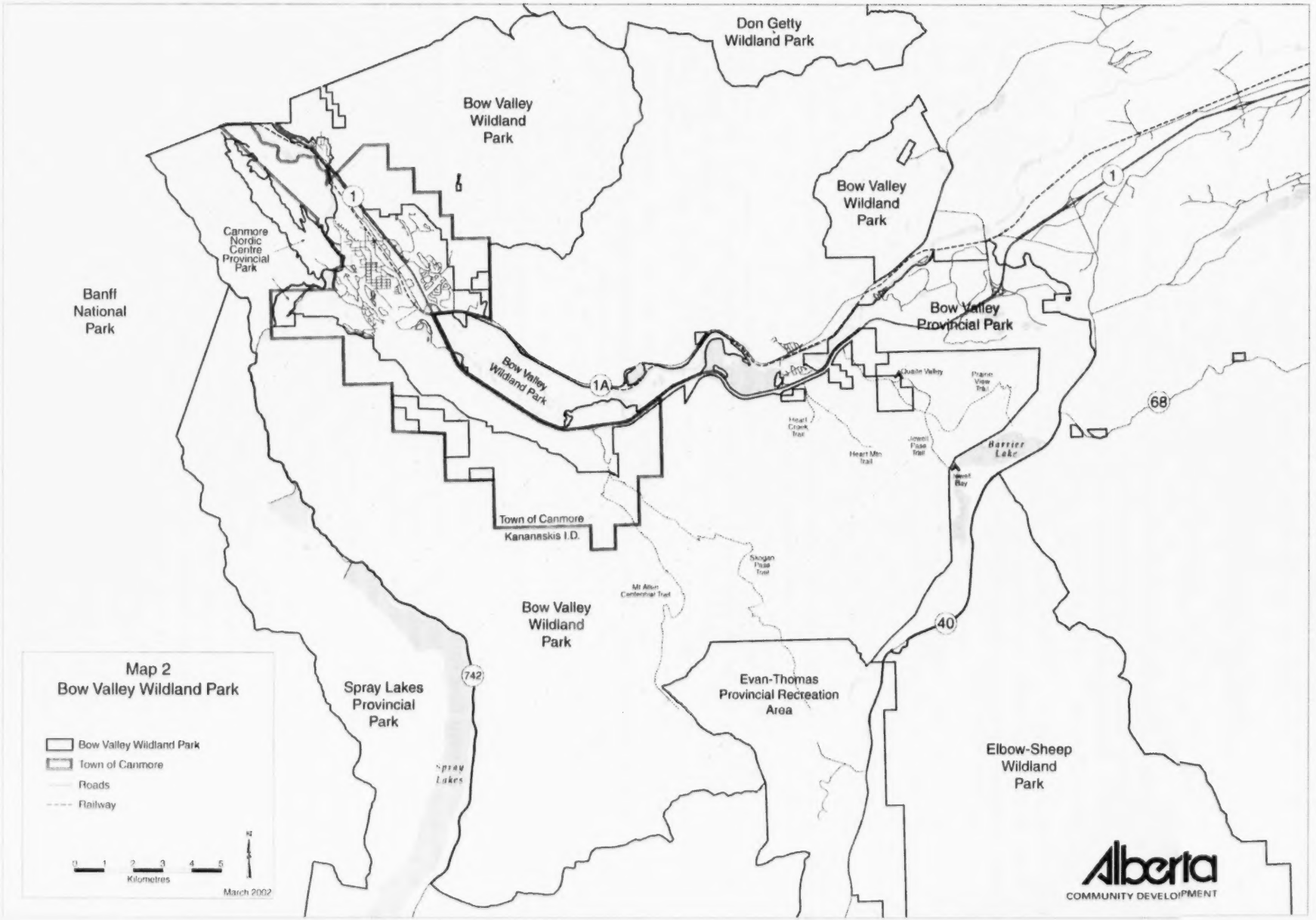
2.0 ROLE IN ALBERTA'S NETWORK OF PROTECTED AREAS

2.1 Contribution to Provincial Objectives

Wildland Parks make significant contributions to the preservation and heritage appreciation goals. Their contribution is especially strong with respect to low-impact, non-facility-based outdoor recreation in wilderness settings and to the tourism goal, especially through guiding and outfitting. Bow Valley Wildland Park has high wildland recreation, scenic and wildlife values and is accessible from the Trans Canada Highway, Highway 1A and the Smith Dorrien Spray Trail. It is very close to the towns of Canmore and Banff and approximately one hour's drive from Calgary.

2.2 Natural History Region, Subregions and Themes

Bow Valley Wildland Park is located mainly in the Rocky Mountains Natural Region and contains areas of Alpine, Subalpine and Montane Subregions. Over 50 Level 2 Natural History Themes have been documented, including a large variety of forest types and extensive bedrock exposures of the Front Ranges of the Rockies. The productivity and diversity of habitats, plants and animals associated with the intermixing of montane, subalpine, and alpine life zones in a readily accessible area is unique in Alberta.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Quaite Valley
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Town of Canmore
Kananaskis I.D.
Skogan
Pass
Trail
Mt Allan
Centennial Trail
Bow Valley
Wildland
Park
40
742
Spray Lakes
Provincial
Park
Spray
Lakes
Evan-Thomas
Provincial Recreation
Area
Elbow-Sheep
Wildland
Park
Map 2
Bow Valley Wildland Park
Bow Valley Wildland Park
Town of Canmore
Roads
Railway
0 1 2 3 4 5
Kilometres
March 2002
Alberta
COMMUNITY DEVELOPMENT

3.0 OVERVIEW OF PROTECTED AREA

3.1 Geology, Landforms, Climate and Soils

Elevations in the Wildland range from 1300 to 3107 meters above sea level. A complex geological history combines with climatic and biologic factors to produce a rich and varied mix of habitats and scenery. Scenic diversity, ready visibility and accessibility have long made it a favourite for natural history enthusiasts and recreational users.

Major geological features include high, sheer Mississippian limestone cliffs and shale slopes and very accessible examples of fractures of the earth's crust such as the McConnell Thrust Fault. Notable peaks include Mt. Laurie (Yamnuska), Mt. Lougheed, Three Sisters and Mt. Rundle. Significant landforms in addition to the cliffs and rugged ridges include talus slopes in various states of stability as well as glacial landforms including kames, eskers, kettles, terraces and moraines. The ongoing processes of mountain building and erosion can easily be observed and interpreted here.

Climatically, the area has been described as "montane-subalpine" (Downing et al 1989). Vegetative diversity indicates a complex climate highly influenced by the extremes in topography, aspect and frequent exposure to strong Chinook winds.

Soils in the Bow Valley Wildland Park are predominantly Brunisols and Regosols with a few small areas of Grey Luvisols on the east end of the park (MacGregor 1984). Brunisols occur in areas where steep slopes restrict the penetration of water into the soil and are commonly found on calcareous parent material. Regosols are indicators of relatively unstable conditions, which interfere with soil development. These soils are generally found on Alpine locations and on the river terraces, steep south and southwest facing slopes and sandy river or creek formed terraces and fans. Grey Luvisols, generally found on calcareous parent material, are common on lower slopes in the mountains and foothills. Leafy humic surface materials on top of clay minerals characterize them. The active Bow River floodplain portion consists of gently sloped gravels, sands and silts with an active alluvial fan present on one tributary stream. The active floodplain of the Bow River is the biggest single factor in the evolution of landforms and related vegetative patterns in this portion of the wildland park.

3.2 Aquatics

The notable fisheries habitat within the Wildland Park includes portions of the Bow River and tributaries upstream and downstream of the Town of Canmore. Brown trout, Rocky Mountain whitefish and other species use these waters. Bill Griffiths Creek in particular is the most important spawning area for brown trout between Bow Falls and Seebe Dam, and has the largest known concentration of spawning brown trout in western Canada. It is fed entirely by groundwater and consequently has a steady flow, which is not affected by the changing volumes in the Bow River. The abundant groundwater upwellings also provide relatively stable temperature and flow regime. Gravels that are ideal for redd construction and aeration of incubating eggs are also present. Parts of the Bow River also have very good rearing habitat for young fish as well as feeding and over-wintering areas for large fish.

The other permanent watercourses present within the Wildland Park are Pigeon and West Wind creeks. While these creeks are currently barren of fish, the potential appears to exist for fish to live and reproduce within both creeks. Preliminary studies (water temperature, water flow and basic habitat evaluations) indicate that fish would survive and probably reproduce within these streams. More detailed studies will be required before deciding whether or not to introduce native cutthroat trout into these two streams. Other streams in the Wildland Park are too small or temporary in nature to sustain fish populations. Two cold sulphur springs with unique associated vegetation are located near the Trans Canada Highway approximately two and four kilometres east of Deadman's Flat.

3.3 Vegetation

The Montane Natural Region, which is found primarily at lower elevations in the Bow Valley Wildland Park, is characterized by coniferous/deciduous mixed wood forests, contiguous coniferous forests, open grasslands and riparian areas along watercourses in the valley bottom. Primary canopy species include lodgepole pine, white spruce, alpine fir, Englemann spruce and trembling aspen. Douglas fir and balsam poplar can also be found in some areas. Common understory species include buffalo berry, several species of willow and a wide variety of other shrubs, grasses and herbaceous plants.

The Sub Alpine subregion is characterized by closed coniferous stands and open coniferous shrub mixed forests at higher elevation. Primary canopy species include lodgepole pine, Englemann spruce, white spruce and alpine fir. Alpine larch is also found in this ecoregion at higher elevation. Willow dominated avalanche paths are common in the Sub Alpine throughout the park.

The Alpine subregion generally located above 2100 m (7000 ft.) is characterized by sparsely vegetated grassland / forb meadows, scrub coniferous found in krumholtz outcrops, and lichen communities in rock dominated terrain. Common tree species found here include alpine larch and alpine fir.

In the Bow Flats portion of the Wildland Park, there are eight distinct vegetation units present (Timoney, 1990), and most are affected by the hydrology of the site. The dominant vegetation type is a mature white spruce forest (54% cover), occurring on subxeric to hygric silty to sandy alluvium. The understory varies depending on site conditions, but is usually either a bearberry/wolf willow/rose, rye grass/sedge or willow/sedge composition. The active floodplain supports a dynamic vegetation complex of willow, wolf willow and graminoid (grass-like) meadows within a subhygric to hygric (moist to wet) moisture regime. Grazing has changed the natural composition of an area of aspen/willow-rose/grass located in the extreme northwest corner. Balsam poplar or poplar-aspen-white spruce forests are present in small amounts, as are sedge and brown moss meadows, willow thickets and a young spruce/herb/hair grass association.

In areas adjacent to roads and trails, non-native plant species, weeds and even ornamental vegetation species occur. Several rare vegetation species being tracked by the Alberta Natural Heritage Information Centre (ANHIC) have been identified in the Bow Valley Wildland Park. The highest number of these recorded sites occurs south of the Trans-Canada Highway between Wind valley and Bow Valley Provincial Park. The Yamnuska area is also notable for its high diversity of vascular plants with over 362 species being recorded including 9, which are rare and 11, uncommon.

3.4 Wildlife

The montane portion of the Bow Valley Wildland Park provides unique habitat for a wide variety of wildlife species. The Bow Valley Wildland Park includes lands identified as critical components in a network of wildlife corridors and habitat patches linking the Kananaskis Valley through Wind Valley, around the developed areas of Canmore and eventually into Banff National Park. Maintenance of these linkages especially for large carnivores such as grizzly bears, cougar, and wolves has been identified as one of the primary objectives of this management plan. This management plan will be a key component in the implementation of the Bow Corridor Ecosystem Advisory Group (BCEAG) recommendations on wildlife corridors and habitat patches.

Features such as slopes, vegetation cover and aspect in association with predictable chinook winds provide excellent conditions for winter range for large ungulate species such as elk, bighorn sheep, and deer. Elk are a significant ungulate species in the Bow Valley with an estimated population of 150 animals. Deer population numbers are unknown but both species (mule deer and white-tailed deer) are present. Wintering bighorn sheep number about 250. Large carnivores such as grizzly and black bears, cougar, and coyotes are residents of the Wildland Park but exact numbers are unknown. Lynx and wolves are occasionally observed within the area. Wind Valley in particular contains some of the most important ungulate winter range and summer grizzly habitat in the region.

Preliminary indications are that a rich moth, butterfly and bird fauna also exists within the Yamnuska portion of the Wildland Park reflecting the intermixing of mountain, foothill and prairie habitat elements.

Elk, mule deer, and white-tailed deer can be seen in the Bow Flats portion of the Wildland Park. While the habitat is good for moose, high susceptibility to road accidents precludes there ever being many moose in the area. Bow Flats provides a relatively large area of habitat and allows movement across the valley. Elk are known to use Bow Flats year round. Beavers are abundant, especially in the abandoned channels. Mink, porcupine, snowshoe hare, and occasional signs of otter have been reported. Least chipmunks and red squirrels are abundant.

Forty-eight bird species have been identified in the Bow Flats portion while over 180 species have been recorded at Yamnuska. These include great grey and horned owls, osprey, goldeneye duck, common merganser, American dipper, varied thrush, pileated woodpecker, Townsend's warbler, northern waterthrush, Leconte's sparrow, fox sparrow, northern oriole and purple finch. Lac des Arcs is an important spring and fall staging area for many species of waterfowl. Mallards, American wigeons, Canada geese, and Tundra swans are the most common species but many other species are present. A number of listed bird, amphibian and insect species, which are being tracked by the Alberta Natural Heritage Information Centre, have been found in the Wildland Park. Amphibians include two species of salamanders and several species of frogs and toads. While exact numbers within the Wildland Park are not known, populations have been monitored at various locations in the Bow Valley.

3.5 Cultural

There is evidence of prehistoric use of the Yamnuska area with tipi rings, hearths and stone tools being found. There are also clusters of archaeological sites across from Harvie Heights and another at the entrance to the Wind Valley but these are not readily visible and unlikely to be disturbed. The one known site of historical interest in the Wildland Park is Georgetown, an old coal mining community located below the Canmore Nordic Centre. There are few remaining structures or artifacts at Georgetown, thus there is a low potential for damage or vandalism. There is an existing interpretive trail and sign at Georgetown, accessible from the Canmore Nordic Centre.

From 1911 to 1929 much of the Wildland Park was located within Rocky Mountains National Park (Banff National Park). When jurisdiction for natural resources was transferred from the dominion to the provincial government in 1930, the national park boundary was moved west to its present location. Most of what is now the Wildland Park was managed as part of the Bow River Forest Reserve from 1930 until 1998.

3.6 Existing Facilities and Use

The existing official facilities within the Wildland Park include several trailhead parking areas, trails for hiking, biking and some equestrian use and one backcountry campground. These are marked on Map 2. The major access points are the Canmore Nordic Centre, Yamnuska trailhead, Skogan Pass/Wind Valley trailhead, Heart Creek trailhead, Barrier Dam trailhead (in adjacent Bow Valley Provincial Park) and Stoney trailhead (in the Evan Thomas PRA) near Nakiska. Sparrowhawk day use site is occasionally used as an access point into the Spray portion of the Wildland. Official existing trails include Skogan Pass and Mt. Allen Centennial, Heart Creek, Trans Canada, Quaite Valley and Jewell Pass, Prairie View and Stoney Trail. The one existing official backcountry campground is located in Quaite Valley. Several unofficial trails and routes are established within the Wildland Park with major ones including Cougar Creek, Stewart and Three Sisters Creek, West Wind, Wind Ridge, Pigeon Mountain, Stonecutters Canyon, Benchlands, Spurling Creek, Lady MacDonald and Ha Ling peak trails. Many popular climbing routes are served by unofficial trails. There are a great many other less used informal trails.

Hiking and mountain biking are popular activities in the Wildland. Canmore is a centre of mountaineering in the Rockies and some of the most popular climbs are located within the Wildland Park (e.g., Yamnuska, Three Sisters, Ha Ling Peak, and Cougar Creek). Some equestrian activity also occurs on Skogan Pass trail, in West Wind Valley, in Bow Flats, benchlands and at Yamnuska. As well, there is

some horse use of the Stoney Trail by clients of Rafter Six Ranch. A growing number of environmental education activities occur within the Wildland Park at selected sites. A variety of special events (e.g. orienteering, filming) also occur in parts of the Wildland Park. Hunting also occurs in the Wildland Park subject to regulations under the Wildlife Act..

No reliable estimates of use levels on the existing designated trails are available. Observations by departmental staff indicate notable increases in numbers of mountain bike users on trails around the Town of Canmore. Conflict between different users of a trail or area also exists. Parking in unauthorized or hazardous locations creates occasional public safety concerns.

Other than the new Lac des Arcs wildlife viewing interpretive trail, there are no formal access facilities for the Bow Flats portion of the Wildland Park. Several informal access points exist and paddling on the Bow River is growing in popularity.

4.0 MANAGEMENT INTENT AND OBJECTIVES

Management Intent

The **management intent** for the Bow Valley Wildland Park is:

"To preserve and protect natural and cultural heritage, while providing opportunities for outdoor recreation and experiencing nature in an undisturbed state".

Objectives

The **management objectives** for Bow Valley Wildland Park in order of priority are:

Preservation: to preserve or enhance subalpine, alpine, montane, riparian and aquatic habitats and linkages and ensure natural ecological processes and cultural resources are maintained.

Heritage Appreciation: to provide opportunities for visitors to experience, understand and appreciate the natural and historical resources of the Wildland Park.

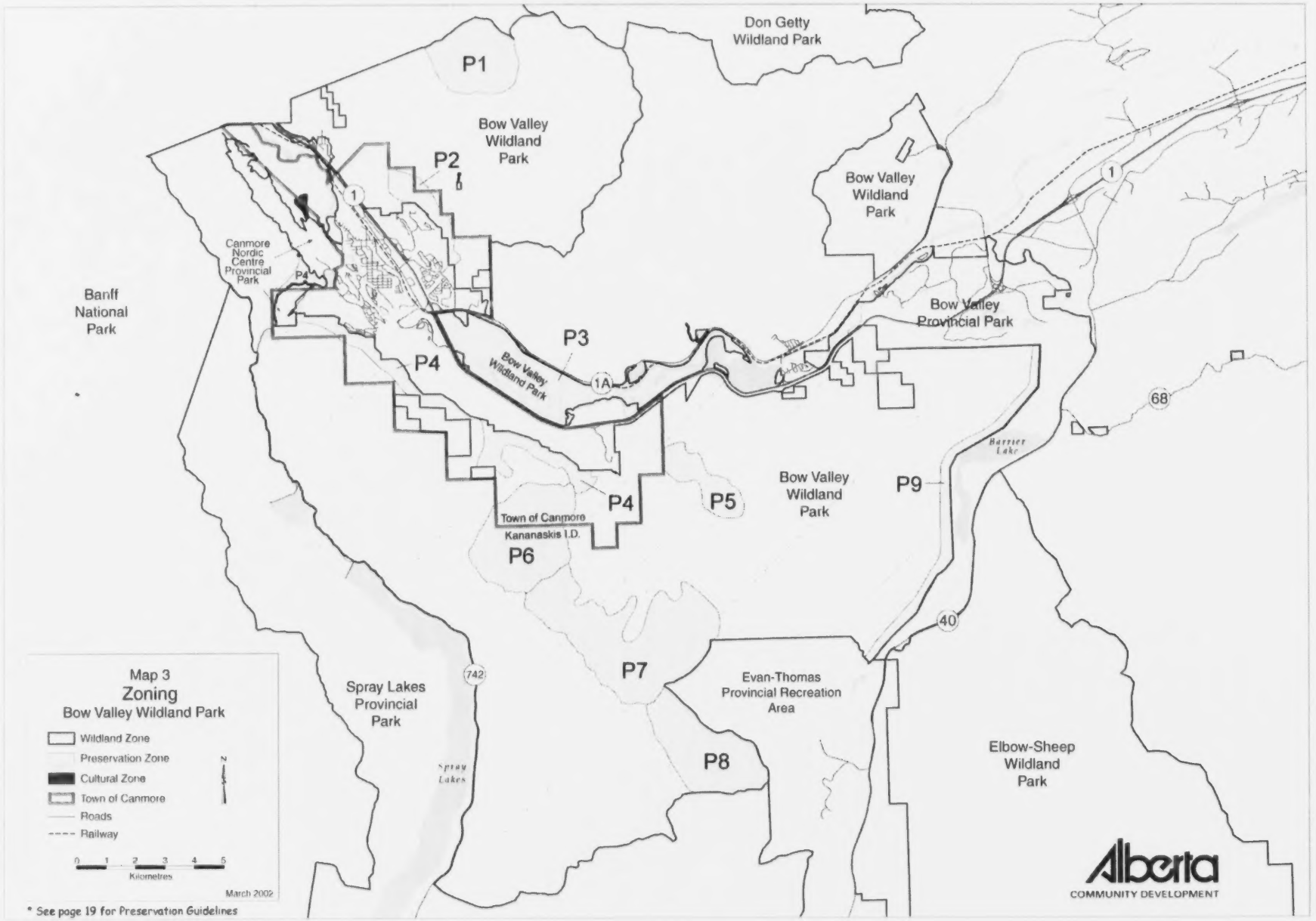
Outdoor Recreation: to maintain or enhance opportunities for non-motorized recreational uses such as hiking, equestrian use, mountain biking, hunting and backcountry camping

Heritage Tourism: to provide opportunities for low-impact tourism so visitors may experience and enjoy the natural features of the park

5.0 ZONING

The four zones that will apply to the Bow Valley Wildland Park are Preservation, Wildland, Cultural and Facility.

Preservation zones have been applied to those portions of the Wildland Park where important habitat values are recognized and use restrictions are necessary. This includes important winter and summer ranges, remaining wildlife movement corridors and the riparian area in the former Bow Flats Natural Area. Consistent with BCEAG Human Use Guidelines, human use in primary wildlife corridors has been restricted within the Wildland Park. See **Map 3** for locations. The guidelines for each preservation zone are as follows:



* See page 19 for Preservation Guidelines

PRESERVATION ZONES
P1 - Mt. Charles Stewart alpine sheep summer range • No camping June 1 to Aug. 31st.
P2 - Wildlife Corridor • (Dec. 1 to June 15th) closure. At other times, use of designated trails only. • No camping and no hunting
P3 - Bow Flats • No camping; no facility development except short interpretive trails and viewpoints; non-motorized random access (foot, horse and boat); develop designated fords of Bill Griffiths Creek if necessary. • No human use permitted in vicinity of Stewart Creek wildlife underpass.
P4 - Wildlife Corridor • Winter/spring (Dec. 1 to June 15) closure of most trails. At other times, use of designated trails only. No camping or hunting.
P5 - Pigeon Mountain alpine sheep/elk winter range • Closure to all uses December 1 to June 15.
P6 - West Wind sheep/elk winter range and carnivore summer habitat • Winter closure to all use December 1 to June 15; no camping anytime except climber's bivuoac*. P7 - Mt. Lougheed alpine sheep/bear summer range • Spring closure of Mt. Allen trail (April 1 to June 21) for sheep lambing, no camping within the zone April 1 to Sept. 30th except climber's bivuoac*.
P8 - North Ribbon sheep winter range • Closure to all uses December 1 to June 15.
P9 - Barrier Lake (spring elk movement) • April 15 to June 15th, no camping within zone. During April 15 to June 15, day use restricted to Prairie View Trail and Stoney Trail from Barrier Dam to Jewell Pass junction. After June 15, camping only at Jewell Bay campsite and no day use restrictions.

- Bivouac is defined as overnight stays without tents or fires.

Wildland zones are intended to maintain features in their natural condition and provide opportunities for backcountry recreation where wilderness experiences are likely. The Upper Sparrowhawk and North Ribbon valleys are sensitive to use impacts and will be subject to camping by permit only and will have regular patrols and monitoring to ensure that their high natural values are being maintained.
Cultural zones apply to the Georgetown site and the Bison Kill site just west of Bow Valley Provincial Park. **Facility** zone applies to the immediate vicinity of Heart Creek and Yamnuska trailheads. Only upgrading of existing facilities or limited expansion of both will be considered as demand increases. Any expansion will consider physical site constraints and minimizing environmental and aesthetic impacts. When formal trailhead facilities are developed at Pigeon Mountain (Skogan Pass, Mt. Allan Centennial, West Wind trails), or elsewhere, a facility zone will be added.

6.0 MANAGEMENT GUIDELINES

6.1 Preservation

6.1.1. Geological/Landforms

Unique geological features such as the patterned ground on Mt. Sparrowhawk, exposures of certain rock types or known fossil beds will be monitored to ensure their protection. These unique features will be inventoried and assessed and more detailed management guidelines developed.

6.1.2 Aquatics

The waters of the Bow River and associated creeks and ponds, especially Bill Griffiths Creek and the Bow River near Georgetown Flats, will continue to be managed using existing legislative and regulatory tools. Any activities that could potentially affect the river or associated waters will require a permit from Alberta Environment and the federal Department of Fisheries and Oceans as appropriate. The possibility of introducing a native species (cutthroat or bull trout) into Pigeon and/or West Wind Creeks will continue to be explored.

6.1.3 Vegetation

Ensuring protection of the exceptional variety of species and, in particular, the rare or uncommon plant species in the Wildland Park will be a priority. An existing inventory and assessment of vegetation provides a good indication of the location, and nature of rare or threatened species within the Yamnuska portion of the Wildland Park. A variety of measures will be taken to ensure that impacts on these plants are eliminated or kept at an absolute minimum. These include careful trail location; close monitoring by staff and stewards, seasonal closures, fencing, and enforcement. Extending this inventory and assessment to other parts of the Wildland Park will be done as resources permit.

Forest insect and disease epidemics that threaten adjacent resource values may be controlled to prevent the spread of the infestation to values at risk. Forest insects and disease conditions will be monitored. Control techniques that cause the least amount of disturbance will be used to minimize the threat to adjacent values.

Restrictive and invasive weed species will be monitored and controlled as required under provincial legislation. The use of herbicides will be kept to minimum with mechanical control being the option of choice where practical. Spot applications of herbicide may be made only where necessary and only if rare, sensitive or unique plants will not be affected. Reclamation and revegetation in Bow Valley Wildland Park will use native species.

6.1.4 Wildlife

One of the key management objectives for the Wildland Park is the protection of important wildlife habitat. The protection of important winter ranges, spring lambing/calving areas, and wildlife corridors will be a high priority. The effects of high levels of human recreational use on wildlife in some corridors is a concern. The department will work with the Town of Canmore and the MD of Bighorn and other jurisdictions to implement the BCEAG recommendations to consolidate or limit human use within wildlife corridors. Trail or area closures such as those required for public safety or those recommended by the Bow Corridor Ecosystem Advisory Committee (BCEAG) for wildlife or habitat protection will be established, maintained and enforced. In the previously approved Wind Valley Management Plan, the impacts of trail use on wildlife in winter were identified as a concern and protective measures were prescribed. These measures called for an annual area closure between December 1 and June 15 of a portion of the West Wind Creek valley. These closures will continue.

The Stewart Creek underpass was designed to provide safe passage under the Trans Canada Highway for wildlife from Three Sister's Resorts land. It is important that this passage be retained for wildlife and not be used for human access to the Bow Flats portion of the park. This area will be signed, monitored and restrictions on human use enforced.

Re-introductions of native species will generally not be considered except where human influences have impacted valuable resources or disease outbreaks have negatively affected the viability of local populations. No exotic species will be introduced into the Wildland Park.

Valuable features of the Wildland Park may, under exceptional circumstances, be threatened by the activities of certain wildlife species. Public safety may also at times be compromised by the actions of some species. Such occurrences may occasionally warrant mitigative measures to control individual

animals and reduce the conflicts. The significance of the threat will be determined on a case-by-case basis. Black and grizzly bear conflicts will be dealt with in accordance with the Kananaskis Country Bear Conflict Prevention Plan (1997).

6.1.5 Cultural

Known archaeological and historic sites will be monitored to ensure their protection. The Georgetown sites will be protected and increased interpretive information provided through cooperation with local groups.

No signage leading visitors to specific archaeological sites will be provided. Additional offsite interpretive signs may be considered. Signage or other means may include information and stories about local prehistoric and historic features or events, existing legislation and regulations governing such features in Alberta and encourage visitor co-operation in proper care of the sites.

6.2 Heritage Appreciation

6.2.1 Interpretation / Environmental Education

Basic trailhead signs will be provided and may include interpretive information about the features in that area. Hiking trail maps and information brochures dealing with visitor safety, recreation opportunities, and special natural features may be developed if use warrants such materials. On-site interpretive signs and/or exhibits will not generally be provided in the Wildland Park except near special features or in high public use areas. No directional signs which promote the Wildland Park, will be provided along Highway 1A or the Trans Canada Highway.

Providing local schools or other groups with information on trails and the proper use of the area for educational purposes will facilitate environmental education use of the Wildland. Teacher and student field programs will continue to be offered.

6.3 Outdoor Recreation

The provision of a wide range of non-motorized outdoor recreation opportunities is an important management objective within the Wildland Park. The following guidelines indicate proposed management approaches.

6.3.1 Access/Staging Areas

The designated trailhead parking area and trail that was developed in the Yamnuska portion of the Wildland Park with the co-operation of Lafarge Canada and other stakeholders, as well as volunteers, will be maintained. A smaller parking area adjacent to the southwest corner of Yamnuska will be developed in cooperation with the adjacent landowner and stakeholders.
The trailhead parking area for Skogan Pass/Mt. Allen trails will be upgraded. Facilities will include parking, toilets, garbage container and a kiosk.

Parking areas will be monitored to determine safety and adequacy at Cougar Creek, Yamnuska, Harvie Heights, and Ha Ling Peak. The existing parking facility at Heart Creek currently sees overflow on a regular basis and will be assessed for possible expansion.

Information kiosks will be installed at other access points as demand warrants, in co-operation with the local municipality and as budget permits. Basic information about the Wildland Park and other management messages (including seasonal or other trail restrictions) will be provided at these kiosks. During restricted periods, an effort will be made to promote satisfactory alternate trail opportunities.

Vehicular use of the existing access roads within the Wildland Park will be restricted to the authorized disposition holder only and government staff for emergency situations such as fire control or when human

life or safety is threatened. Vehicle access for research or monitoring purposes will only be permitted if shown to be necessary.

6.3.2 Trails

Non-motorized, nature oriented recreation, such as hiking, mountain biking, climbing, horse riding, bird watching, and photography will continue. Existing designated trails will be monitored, maintained or upgraded as necessary. An inventory and assessment of existing random use trails will be undertaken with assistance from volunteers. This will address the proliferation of trails and associated concerns about impacts and aesthetics. Monitoring of use levels and impacts on undesignated trails including West Wind, Pigeon Mountain, Cougar Creek, Lady MacDonald, Ha Ling, Spurling Creek/West Wind Pass, Mt. Rundle, those above the Canmore Nordic Centre, Stewart Creek, Three Sisters Creek and Benchlands will be done as time and resources permit. Some existing random trails within the Wildland Park may be designated, reclaimed or closed to address ongoing impact or erosion concerns. Within the Bow Flats portion of the Wildland Park, canoe, foot and some horse access will continue to be permitted.

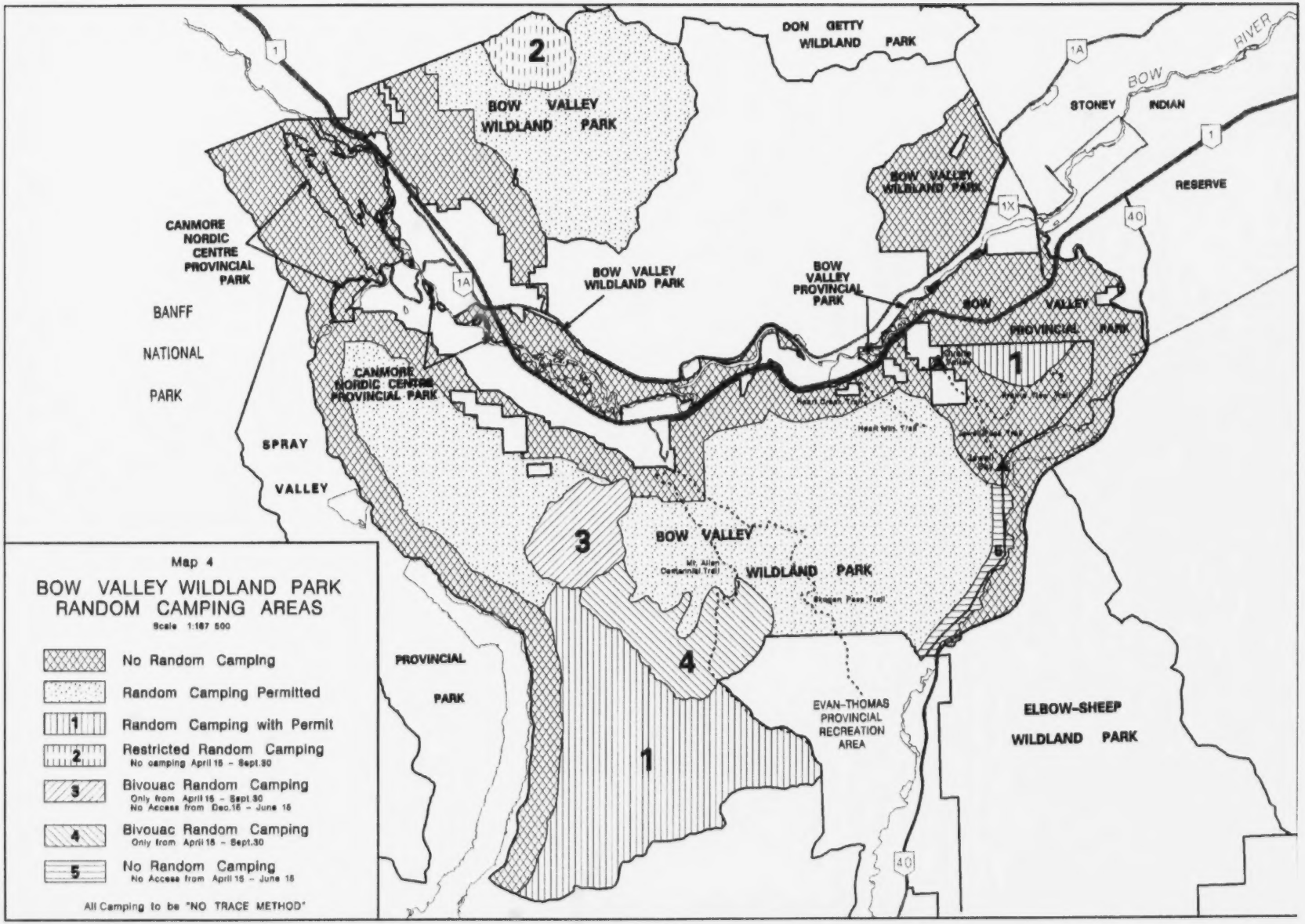
While protection of important or sensitive habitat or species will receive top priority, every effort will be made to develop and maintain a variety of appropriate and high quality trail recreation opportunities in the Bow Valley Wildland Park. A good working relationship will be established and maintained with trail users, neighbouring jurisdictions and volunteers and they will be involved in decisions about trail planning, construction, reclamation, maintenance, monitoring and the provision of good user information.

6.3.3 Backcountry Camping

The existing designated backcountry campground at Quaite Valley will be maintained and operated using the existing reservation/fee system. Firewood will be provided. At this time, no other backcountry campsites are planned within the Wildland Park. Consistent with existing legislation and Kananaskis Country Forest Land Use Zone regulations, no random camping will be permitted within 1 km of these campground or public roadways. Elsewhere within the Wildland Park, random camping will be permitted where zoned for it (see map 4). Areas 1, 2, 3 and 5 shown on Map 4 have access or camping restrictions due to seasonal wildlife sensitivities. Area 4 on Map 4 requires that campers acquire a permit in order to limit numbers of campers, group size (maximum 10), and duration and to reduce impacts and conflicts. Area 4 is easily accessible, has high scenic values and has seasonal wildlife or other sensitivities. Where random camping is permitted, no trace/minimum impact practices will be encouraged via trailhead signs and other means. No campfires will be permitted. Staff and volunteers will monitor impacts and conflicts due to random backcountry camping and, if they become too severe, additional measures will be implemented. Within the West Wind Valley (Area 2 on Map 4) and Mt. Lougheed (Area 3) camping zones, bivuoacs will be permitted with bivy sacs and stoves (no tents or fires).

6.3.4 Other Recreational Activities

Opportunities for a variety of climbing activities will continue to be provided within the Wildland Park. Non-motorized access to the various routes and areas used will occur from the existing trailhead parking areas. Monitoring of public safety concerns associated with vehicle parking in unofficial locations will continue and, if unsafe, the department will work with area climbers and Alberta Transportation to find an acceptable solution. The Provincial Parks Act prohibits the damaging of rock faces or related features. This includes the cleaning of rock faces of soil or vegetation. Staff will work with local climbing groups to minimize or eliminate this as well as addressing concerns about adequate disposal of human and other waste at popular climbing sites.


DON GETTY WILDLAND PARK
BOW VALLEY WILDLAND PARK
BOW VALLEY WILDLAND PARK
BOW VALLEY WILDLAND PARK
BOW VALLEY PROVINCIAL PARK
BOW VALLEY PROVINCIAL PARK
CANMORE NORDIC CENTRE PROVINCIAL PARK
CANMORE NORDIC CENTRE PROVINCIAL PARK
BANFF NATIONAL PARK
SPRAY VALLEY
PROVINCIAL PARK
EVAN-THOMAS PROVINCIAL RECREATION AREA
ELBOW-SHEEP WILDLAND PARK
STONEY INDIAN RESERVE
BOW RIVER
Mt. Allan Centennial Trail
Skogan Pass Trail
Heart Mtn. Trail
Map 4
BOW VALLEY WILDLAND PARK
RANDOM CAMPING AREAS
Scale 1:167 500
No Random Camping
Random Camping Permitted
1 Random Camping with Permit
2 Restricted Random Camping
No camping April 15 - Sept.30
3 Bivouac Random Camping
Only from April 15 - Sept.30
No Access from Dec.16 - June 15
4 Bivouac Random Camping
Only from April 15 - Sept.30
5 No Random Camping
No Access from April 15 - June 15
All Camping to be "NO TRACE METHOD"

In the vicinity of the Lafarge sandstone quarry, access, safety and aesthetics will continue to be assessed in conjunction with the quarry operator and representatives of stakeholder groups. Measures such as trail re-routes, signage and fencing of the quarry will be considered. Lafarge has defined the future extent of quarrying here and a new lease has been issued. This will not result in any further disturbance to the remaining adjacent sandstone cliffs, which are used for practice climbing. The boundary will be adjusted to be consistent with that of the quarry lease and a small Forest Land Use zone, which will be established adjacent to the lease.

Environmental education activities will be supported at selected locations within the Wildland Park and existing educational partnerships will be supported and improved.

Special events involving large groups (more than 50 people) generally will not be permitted in the Wildland Park. An exception to this will be the Yamnuska portion and some areas adjacent to the Canmore Nordic Centre where larger non-motorized special events may be considered so long as impacts to vegetation and rare, endangered and unique species and features can be mitigated. Any special recreational events will be reviewed on a case-by-case basis and will continue to require a permit issued by Alberta Community Development. Conditions will be attached to these permits which are designed to minimize impacts and conflicts. Examples include limitations on the size of the group, the timing and duration of the activity.

Hang glider and parasail launching from the established site on Mt. Lady MacDonald (adjacent to the Wildland Park) as well as Ha Ling Peak will be permitted. Access to Ha Ling Peak launch locations will be by foot only. The department will monitor the effects of this use on the Wildland Park and address any concerns on a case-by-case basis.

Hunting will continue to be permitted within the majority of the Wildland Park, subject to existing regulations under the Wildlife Act, and Town of Canmore bylaws.

6.4 Tourism

Non-motorized commercial guiding and outfitting will be permitted within the Wildland Park. It will be managed through an annual permit issued by Alberta Community Development. These permits include conditions designed to minimize impacts and conflicts. All activities will be consistent with the various guidelines within this plan that restrict the timing or type of use. Staff will continue to work in partnership with the guides and outfitters and organizations like the Friends of Kananaskis Country to inform visitors and promote the kinds of tourism services and opportunities that are available within the Wildland Park. Operators will be encouraged to familiarize themselves with the guidelines in place, the reasons for them and, in turn, to educate their clients about them.

Helicopter use within the Wildland Park will continue to be managed under the terms of the "Voluntary Helicopter Operating Guidelines" established by the department and local operators. This allows for landings for emergency or authorized government purposes as well as for commercial purposes in the established landing areas on Mt. Charles Stewart in the upper end of Cougar Creek valley. These commercial flights within the Wildland will continue to be subject to the conditions of an annual Letter of Authority that specify the number, frequency and timing of landings and passengers as well as other factors in order to reduce the impact on wildlife or other visitors. No other helicopter landing for recreation or tourism purposes will be permitted within the Wildland Park.

7.0 DISPOSITIONS

Existing dispositions in the Wildland Park (see Appendix D) are located mainly in the lower elevations of the Bow Valley and include power lines, water control structures, communication towers and grazing permits. These dispositions will continue to be honoured. Where currently permitted, limited vehicle access for inspections, operations or maintenance will continue. Those communication facilities currently without vehicle access will continue to be maintained periodically by helicopter under the terms of the

existing Voluntary agreement between the department and the local helicopter operator. The existing utility corridors will be retained, but only limited mechanical brush removal for vegetation control will be permitted. An additional power line corridor may be required in the future for the relocation of the Three Sisters Resorts Inc. power line as outlined in the Bow Valley Special Places Summary Document. Other future linear developments such as roads, power lines or pipelines must be located outside the Wildland Park and no new surface dispositions will be issued. Two 40m wide strips, between both sides of Highway 1 and the adjacent Wildland Park between Canmore and the Kananaskis River, have been reserved for possible future expansion of the highway as outlined in the Bow Valley Special Places Summary Document. Applications for access through the Wildland Park to pre-existing surface dispositions will be reviewed on a case-by-case basis. Wherever possible, access will be located outside of the Wildland Park.

Three grazing permits within the Wildland Park (Cross Z, Walter Morris and the Kananaskis Guest Ranch) will continue to be honoured. The permit for grazing in the former Bow Flats Natural Area is not transferable. The stocking rate and impacts on riparian and other areas will be monitored and may result in changes to grazing management. Other domestic livestock grazing will not be permitted.

The owners of both crown and private mineral rights can make application for surface access to explore or develop their rights and the application would be subject to a thorough review. Such a review would consider the potential for disturbance to protected area lands. New Crown subsurface dispositions will be issued with a "no surface access" addendum.

8.0 ADJACENT LAND USE

Effective working relationships will be established and maintained with adjacent landowners and stakeholders in the vicinity of the Wildland Park.

Lands adjacent to the Wildland Park in the Benchlands area (SilverTip and Eagle Terrace) are zoned for and have been developed for golf course and residential uses. Regulations regarding seasonal use of golf courses, limited residential densities, and wildlife monitoring are in place to minimize and further assess impacts on wildlife corridors in the area. The Town of Canmore is also utilizing conservation easements as a means to protect wildlife corridors on some private lands in this area.

Private lands within the Town and adjacent to Bow Valley Wildland Park that extend from the Rundle Forebay to Wind Valley are zoned for residential and resort use. Portions of lands owned by Three Sisters Resorts will be managed as wildlife corridors through a Conservation Easement agreement with the Alberta government. Developments on leased public lands (Alpine Resort Haven, Kananaskis Gun Club) in the Pigeon Creek area allows for a variety of recreational uses adjacent to the Wildland Park boundary. Staff and volunteers will continue to monitor the effects of these activities or facilities on the use of the Wildland Park.

Lafarge or previous operators have quarried sandstone adjacent to the Yamnuska portion of the Wildland Park since 1957. Lafarge has redefined the area required to continue their quarry operation for up to 100 years while minimizing the impact and conflicts on/with the adjacent Wildland Park. A new Mineral Surface Lease has been issued. The lands, which remain within the sandstone reserve but outside Lafarge's new lease, will be designated as a Forest Land Use Zone and managed in the same manner as the Wildland Park. The Forest Land Use Zone designation provides an added level of protection for these lands while still allowing for possible limited future minerals access and development. Regulations will be established under Forest Land Use Zone legislation to prohibit off highway vehicle use, camping, fires, and removal of natural vegetation. An adjustment to the common boundary between the sandstone reserve and the Wildland Park will be made to reflect the recent quarry lease boundary changes. The LOC held by Lafarge for the access road to the quarry will be honoured and staff will continue to work with Lafarge to minimize impacts and conflicts on visitors to this portion of the Wildland Park.

The landfill located immediately adjacent to the southwest corner of the Yamnuska portion of the Wildland Park has been upgraded to a Class 3 Regional Waste Management Facility which may include the disposal of lime and limestone rock waste, gravel mining, composting, recycling and a waste transfer station. The Bow Valley Waste Management Commission is working with stakeholders to control blowing dust and litter. Public access for climbing or hiking in this vicinity will be maintained by developing a suitable parking area and trail that bypasses the landfill.

Within the Bow Flats portion of the Wildland Park, there are four issues that will continue to be addressed as required. The first issue relates to activities of the CPR including the means by which it controls vegetation along its tracks, which border the northern portion of the area. The potential exists for chemicals, if used in vegetation control, to leach into Bill Griffiths Creek and harm trout populations. Chemical or toxic spills may also result from derailed or damaged rail cars. Similarly, the spill over into Bill Griffiths Creek of coarse gravels laid down for track bed maintenance will be addressed as will litter concerns. Staff will continue to work with CPR officials to address these issues.

The second issue is the potential future expansion of Highway 1 and Highway 1A and potential effects on water flows or the movement of species through the area. Staff will be involved in any future discussion related to highway expansion through the present referral process.

The third issue is the effects of the ongoing growth and development in Canmore, Banff, Deadman's Flats and Exshaw on the Bow River and Bow Flats area. This relates both to the downstream effects of sewage, the potential pollution problem from nearby lands, and the impacts on wildlife movement through Bow Flats. Staff will continue to monitor and work with the Town and other stakeholders to prevent or mitigate the negative impacts of ongoing activities.

Fourthly, the Bow Corridor Ecosystem Advisory Group will continue to address the issue of wildlife corridor and habitat patch connectivity and human use management within these areas.

Lands overlying the three undeveloped (subsurface) mineral leases in the Quaite Valley/Heart Mountain area are not included in the Wildland Park and are not covered by this management plan. The owners can make application to explore or develop these leases according to the terms of the Bow Corridor Integrated Resource Plan. Such applications would be subject to a thorough review. Such a review would consider the potential for disturbance to nearby protected area lands. Approval for surface access would either see a disposition issued or the boundary amended. The development of the portion of the mineral lease inside Kananaskis Country is prohibited by policy.

The Mt. Lady MacDonald Commercial Recreation Lease and associated activities are an adjacent land use and not covered by this management plan.

CANMORE NORDIC CENTRE PROVINCIAL PARK

1.0 INTRODUCTION

1.1 Background

The Canmore Nordic Centre Provincial Park (CNCPP) was designated by Order in Council in 1998, along with other protected areas in the Bow Valley. Prior to that, the Park had been part of the much larger Canmore Nordic Centre Provincial Recreation Area created in 1986 to host the cross-country skiing, biathlon and Nordic combined events for the 1988 Winter Olympics.

The purpose of a provincial park is to conserve and manage flora and fauna; to preserve specified areas and objects of geological, cultural, ecological or other scientific interest, and; to facilitate their use and enjoyment. This designation is appropriate for the Canmore Nordic Centre in view of the importance of this facility for year round recreation, competition and training, as well as the significance of this area and surrounding lands for wildlife and scenic viewing.

Lands including Grassi Lakes and the associated trail have been added to the Canmore Nordic Centre Provincial Park. This will allow for an appropriate degree of protection for various natural and cultural features here while accommodating existing recreation activities. As well, several nearby islands in the Bow River and a parcel of land on the north bank of the river just upstream from the Trans Canada Highway bridge have been redesignated as part of the Canmore Nordic Centre Provincial Park (see Map 5).

1.2 Significant Features

The Nordic Centre is significant provincially and nationally as a training and competition site for cross country and biathlon activities. Summer and winter recreation activities are also very significant. It is easily accessible from the Towns of Canmore and Banff as well as the City of Calgary. In addition to its importance for sport and recreation, it also has significant wildlife habitat. The Grassi Lakes trail is very popular with hikers, and cliffs in the vicinity of these small lakes are used for rock climbing. In addition, there are notable native rock paintings on site. Those lands along the Bow River from the vicinity of the Nordic Centre downstream to the Trans Canada Highway bridge are important riparian habitat and also provide elk sanctuary.

2.0 ROLE IN ALBERTA'S NETWORK OF PROTECTED AREAS

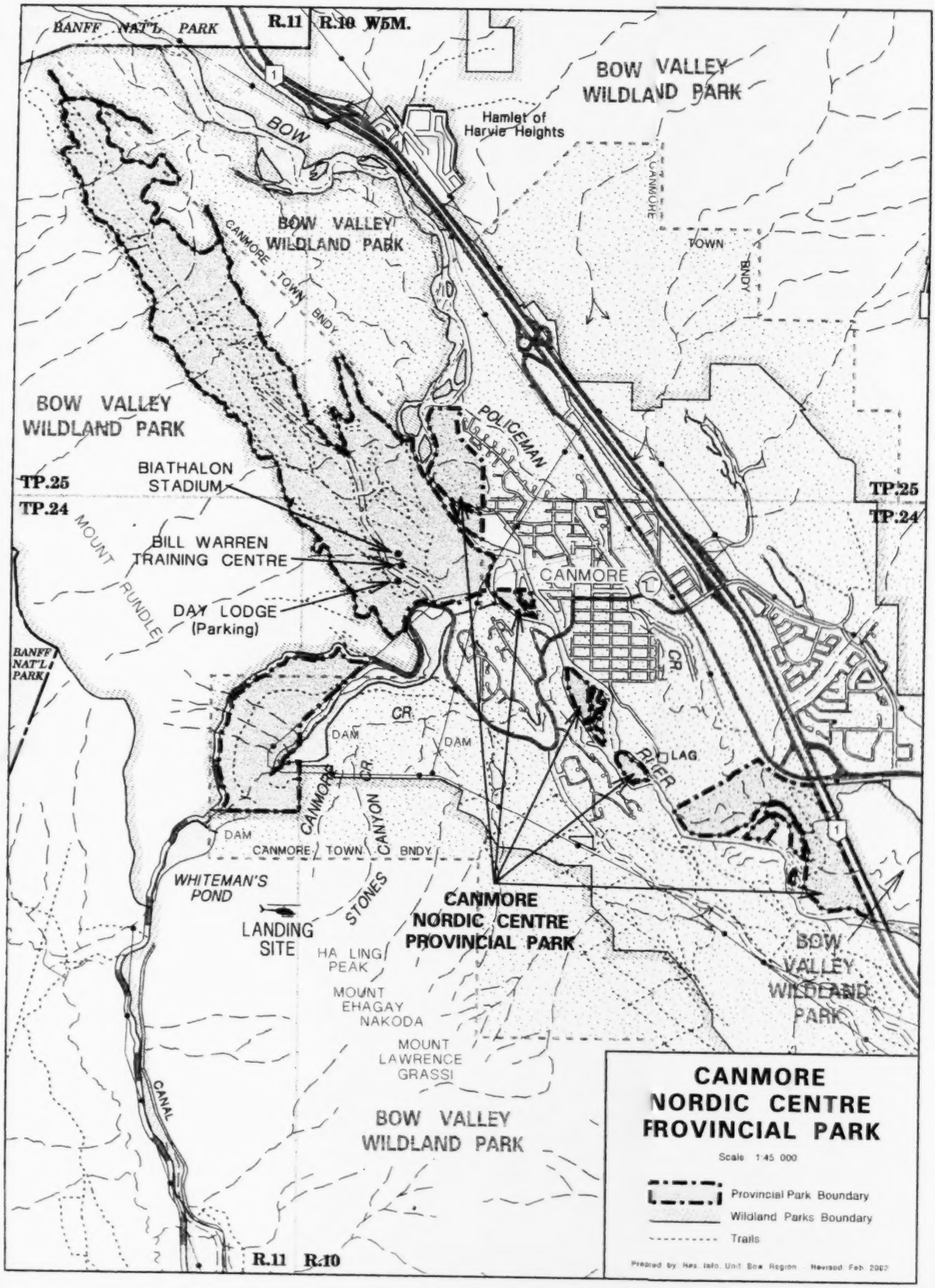
Canmore Nordic Centre Provincial Park is located in the subalpine subregion of the Rocky Mountains and contains at least 8 Level 2 Natural History Themes including modified morainal landforms and several different forest communities.

3.0 OVERVIEW OF PARK

3.1 Features

3.1.1 Access

Public vehicle access is currently via the Town of Canmore and along SR 742 (Smith Dorrien-Spray Trail) to the existing parking areas adjacent to the day lodge. The new Three Sisters Parkway interchange on the Trans Canada Highway will provide more direct access to the park for westbound traffic. The Nordic Centre is also connected to the Town of Canmore trail system and with Banff National Park via the Rundle Riverside trail. A trailhead parking facility for Grassi Lakes trail is located just off SR 742 (see map 5). No access is provided for those lands along the Bow River, which have been added to the


BANFF NAT'L PARK
R.11
R.10 W5M.
BOW VALLEY WILDLAND PARK
Hamlet of Harvie Heights
BOW
CANMORE TOWN BNDY
BOW VALLEY WILDLAND PARK
POLICEMAN
BOW VALLEY WILDLAND PARK
TP.25
TP.24
BIATHALON STADIUM
BILL WARREN TRAINING CENTRE
DAY LODGE (Parking)
MOUNT RUNDLE
CANMORE
CR.
DAM
CANMORE CR.
CANYON
RIVER
LAG
CANMORE TOWN BNDY
WHITEMAN'S POND
LANDING SITE
STONES
CANMORE NORDIC CENTRE PROVINCIAL PARK
HA LING PEAK
MOUNT EHAGAY NAKODA
MOUNT LAWRENCE GRASSI
BOW VALLEY WILDLAND PARK
CANAL
R.11
R.10
CANMORE NORDIC CENTRE PROVINCIAL PARK
Scale 1:45 000
Provincial Park Boundary
Wildland Parks Boundary
Trails
Prepared by: Res. Info. Unit Bow Region Revised: Feb 2002

Map 5

Canmore Nordic Centre Provincial Park although some portions are accessible on foot or boat from within the Town.

3.1.2 Geology/Landforms/Soils

The CNCPP has an area of approximately 480 hectares and ranges in elevation from 1350 to 1650 meters above sea level. It lies mainly on a large morainal terrace, which has several gullies cutting across it formed by run-off from the high slopes of Mt. Rundle above. This morainal deposit dates from the last ice age approximately 11,000 years ago. Besides being incised by several gullies, there are several alluvial deposits composed of rocky material brought down slope by stream action. There is one notable small bedrock outcropping near the former Walker Strip Mine near the middle of the park. Drainage is generally moderate with small isolated patches of organic bog and less well-drained soils. Slopes are varied and topography is mostly gently rolling. The Grassi Lakes portion is located on colluvial slopes and has prominent bedrock limestone outcroppings near the lakes.

Soils in the Park are predominantly Brunisols and Grey Luvisols (MacGregor 1984). Brunisols occur in areas where steep slopes restrict the penetration of water into the soil and are commonly found on calcareous parent material. Grey luvisols, generally found on calcareous parent material, are common on lower slopes in the mountains. Leafy humus surface materials on top of clay minerals and illuvial clays are present.

3.1.3 Vegetation

The Canmore Nordic Centre Provincial Park includes elements of both montane and subalpine vegetation. It is characterized by closed coniferous forest with some small stands of aspen located near the east end of the park. Dominant canopy species include white spruce and lodgepole pine. Small pockets of Englemann spruce, alpine fir and Douglas fir can also be found at the Nordic Centre.

Common understory species in the Nordic Centre include Buffalo Berry (common along trail edges), several species of Willow, Labrador Tea and Creeping Juniper. Introduced wheat grasses and fescue, as a result of reclamation of past mining in the area, cover one large open meadow near the middle of the park.

The Alberta Natural Heritage Information Centre is tracking several plant species occurring in the Canmore Nordic Centre Provincial Park.

3.1.4 Aquatics

Fishery resources found within or adjacent to the CNCPP are in the Bow River and Grassi Lakes. The aquatic resources of the Bow River are described more fully on page 14. Grassi Lakes have been stocked historically and presently contain a self-sustaining population of brook trout.

3.1.5 Wildlife

Elk is the predominant large ungulate species utilizing the islands in the Bow River, seeded grass areas near the entrance to the Nordic Centre and the upper slopes in the vicinity of the old ski hill. This latter area which is mostly in the adjacent Wildland Park, was cleared of conifer cover prior to the 1970's and has regenerated into a mixture of deciduous trees, shrubs, and grasses important to grazing ungulates in the spring. The area of mixed aspen and pine above the stadium area within the Park provides habitat for numerous bird species. This area also includes Buffalo Berry, which provides important bear food in the late summer and fall. Carnivore (bears, wolves, cougars) movement is known to occur above and within the Park.

3.1.6 Cultural

A number of First Nations paintings (pictographs) are found on rock outcrops at Grassi Lakes. Such paintings are rare and valuable archaeological features, with only a few dozen similar sites known in the province. These paintings are protected under the Historical Resources Act. Contemporary First Nations people who continue to visit and revere the paintings consider them sacred. There are no other known significant archaeological sites within the Park.

The Canmore Nordic Centre Provincial Park and vicinity has a coal mining history. In 1910, geologists prospected and found coal seams below the current biathlon facilities near the Bow River. An early settlement named "Georgetown" was established and the Georgetown Coal Company mined coal in this area from 1912 through 1915. An interpretive trail, which starts at the Nordic Centre, describes this development. The company later became Canmore Mines Ltd., which established several other mines to the east of the Nordic Centre. Later, it strip-mined coal in what is now referred to as the "Mine Meadows," a reclaimed clearing located in the Centre of the CNCPP lands. This mining activity was started in 1967 and closed in 1975. The area was reclaimed (seeded and planted pine seedlings) in 1979.

Although recent, the other significant event that led to the creation of the Nordic Centre and has greatly influenced its ongoing role was the 1988 Winter Olympics. Constructed between 1984 and 1988 as part of the Alberta Government's commitment to the 1988 Winter Olympic Games, the Nordic Centre was designed to accommodate the cross country, biathlon and Nordic combined events. While its short-term mandate was to accommodate Olympic level Nordic competitions, its longer-term mandate was to become a world-class training and recreational facility and this mandate continues today.

3.1.7 Existing Facilities and Use

Parking

Public parking is provided for 123 cars in front of the day lodge, with space for approximately 150 additional cars in an overflow lot east of the stadium. Service parking is available for approximately 50 cars in front of the Bill Warren Training Centre, adjacent to cross-country and biathlon team rooms, and the maintenance compound. The Nordic Centre has parking for eight buses.

During major events, there is a shortage of parking and public vehicle access. Event organizers must provide a parking/traffic plan to the Centre's management for approval. These usually require a shuttle bus from off-site parking.

The parking area at Grassi Lakes trailhead accommodates approximately 20 vehicles and provides toilet, garbage and picnicking facilities.

Day Lodge and Stadium

The day lodge is the principle structure and functions as the administrative and visitor service centre for the Canmore Nordic Centre. The ground floor contains public reception, administration offices, lounge, cafeteria, public washrooms and locker facilities. The upper floor includes multi-purpose meeting rooms, washrooms, and a gallery for race officials and media. The 40m X 100m infield located directly adjacent to the day lodge, is the area in which all cross-country events start and finish. Spectator facilities are provided here. The infield is also used extensively for ski lessons. Twelve team rooms are located adjacent to the stadium.

Competitive Ski Trails

The 52 km of competitive ski trails are located to the south, north and west of the stadium site. Thirty-two km are for cross-country while 20 km are for the biathlon competition. To avoid conflict among cross-country, biathlon and recreational trails, 25 trail bridges are located throughout the site.

To ensure the dependability of snow, snowmaking extends along approximately 10 km of trails near the day lodge. This consists of seven separate loops of dual air and water lines, which run through the stadium area and along trail corridors. Pumps and compressors are located on the Rundle Forebay reservoir east of the site.

The trail system at the Centre has fallen behind international competitive standards in aspects such as trail length, profile and stadium layout. For these reasons, it will be necessary to modify and change some of the existing trails. In addition, the snowmaking system and its distribution piping system need to be upgraded and realigned.

Recreational Trails/Services

In addition to accommodating elite athletes, the Canmore Nordic Centre has fulfilled the mandate of Kananaskis Country by providing recreational skiing opportunities. Throughout the winter, skiing has been available to the public on more than 20 km of clearly marked and maintained recreational trails. Evening skiing has been provided on 4 km of lit trail north of the stadium area. Two concessionaires provide visitor services at the Centre. These include a cafeteria and lounge in the Day Lodge, and a sports shop offering rentals, sales and lessons in the Bill Warren Training Centre.

In the summer, the trails at the Nordic Centre are available to the public for mountain biking, hiking, jogging and walking. The sport shop provides mountain bike rentals, lessons and guided tours. Mountain bike clubs have also used the trails for recreational riding and training. New to the Centre since 1998 is an 18-hole Disc Golf Course used by the public at large and occasionally for disc golf competitions.

Bill Warren Training Centre

The Bill Warren Training Centre, southwest of the day lodge, was constructed in 1994 by the Calgary Olympic Development Association (CODA) and provides offices, indoor training facilities, meeting rooms and washrooms to elite athletes and sports organizations. It also contains an equipment rental and ski-school, which serve both novice and advanced skiers. Interest has been expressed by CODA in expanding the Centre.

Biathlon Centre and Shooting Range

The Biathlon Centre, at the northwest end of the stadium, consists of a 100 square meter officials building, a 32 lane shooting range, a biathlon start-finish area, a mass start area, a 50 meter penalty loop, terraced spectator stands, and an electronic scoreboard. All biathlon competitions and training are conducted from this location. Four biathlon team rooms are located east of the shooting range. Upgrading of the shooting range and the existing biathlon trails is required to bring them up to current international standards.

Competition, Training & Special Events

Many competitive events and training are scheduled at the Canmore Nordic Centre from November through the end of March. Nordic ski clubs throughout Alberta, British Columbia and Saskatchewan rely on the Canmore Nordic Centre to run and host various segments of their programs. Uses range from biathlon training, cross country ski lessons, Jackrabbit children's programs, coaching clinics and officials and leadership courses. As well, international calibre athletes from Canada, the USA, Australia, Japan and other countries have utilized the Centre in their yearly training programs. In summer, provincial, national, and international mountain bike competitions, including the Cross Country World Cup and orienteering events have been hosted. Disc golf competitions have begun to occur here in the summer. Such use is expected to continue to grow in the future. The Canmore Nordic Centre also hosts a variety of special events year round.

Maintenance Building and Compound

Site maintenance is coordinated from a 260 square meter building in the southeast corner of the stadium area. It contains vehicle service bays, a shop area, staff offices and washrooms. Adjacent to the building is parking and outside storage for trails maintenance and snow grooming equipment. Updating and some expansion of these facilities over time are anticipated.

Visitor Use

During the 1998-99 season 348,790 visitors were counted. In recent years, the number of summer users has grown to equal that in winter. Increases in both recreational use and competitions have occurred especially summer mountain biking. Given the Nordic Centre's accessibility, range of opportunities, level of service including snowmaking and the day lodge, these increases are expected to continue. Other key factors that influence use levels include weather and trail (especially snow) conditions, the presence of very active local ski clubs and school programs. Temporary closures of some trails during larger events and congestion in the parking lots and overflow parking onto nearby roadways have raised concerns about public accessibility, safety and visitor satisfaction. These use trends have been major factors as ideas for expansion or upgrading have been considered.

3.2 Role in Recreation and Tourism

While no studies have been undertaken to identify and quantify social and economic benefits attributable to the Canmore Nordic Centre, there is little doubt that these benefits are significant. The Nordic Centre is a member of the Canmore Tourism Agency, participates in various tourism/marketing activities through this organization and has been promoted as the "flagship" of its tourism-marketing program. According to local reports, when a major competition is held, local accommodations are almost completely booked with noticeable increases in food service and retail purchases. Canmore Nordic Centre Provincial Park also has strong ties to the residents of the Town of Canmore through its relationships with the Canmore Nordic Ski Club, and various outdoor/sport retail shops. These organizations co-ordinate/run various sporting events and outdoors programs at the Centre each year including large numbers of lessons to school groups. These events draw participants locally and from a wide range of other areas, and also rely on the local community for the numerous volunteers it requires to run these events and programs.

A more intangible benefit that must be considered is the recognition enjoyed by both Canmore and Calgary, resulting from successfully hosting an Olympic competition. The 1988 Calgary Winter Olympic Games, and the continuing use of the Canmore Nordic Centre was selected by a Russian delegation as a model for construction of a biathlon Centre in western Siberia. This international profile is unquestionably of economic benefit to the region.

The Grassi Lakes trail and lakes area is significant for hiking, interpretation and rock climbing.

3.3 Relationship to Adjacent lands

Canmore Nordic Centre Provincial Park is almost surrounded by the Bow Valley Wildland Park. These adjacent lands will be managed for environmental protection and informal, non-motorized recreation only. Canmore Nordic Centre Provincial Park also touches the boundary of Banff National Park to the west. The Centre's "Banff Trail" enters the National Park and becomes the Rundle Riverside trail. The park has a working relationship with the Banff Warden Service for trail, wildlife, and other land management issues. Just outside the southeast corner of the Park is the Trans Alta powerhouse. In order to protect the powerhouse from damage due to erosion on the slopes above it, a small diversion ditch is maintained on adjacent park lands. There is an agreement in place to permit Trans Alta to access and maintain this diversion ditch. The Grassi Lakes portion of the park includes a service road to the Trans Alta penstock.

The Nordic Centre relies on the Town of Canmore for emergency services (fire, medical, police) coverage on an ongoing basis, as well as specific requests for special events.

4.0 MANAGEMENT INTENT AND OBJECTIVES

Management Intent

"To manage visitor activities while protecting the integrity of wildlife corridors and habitat"

The **management objectives** in order of priority are:

Outdoor Recreation

To maintain or enhance opportunities for year round trail recreation, competition and training activities.

Preservation

To protect the integrity of wildlife movement corridors and habitat within and adjacent to the park.

Tourism

To provide a range of competitive and recreational events that complements the Centre's mandate while providing benefits to visitors and the local community.

Heritage Appreciation

To maintain or enhance opportunities for visitors to experience, understand and appreciate the resources and history of the park and the Bow Valley.

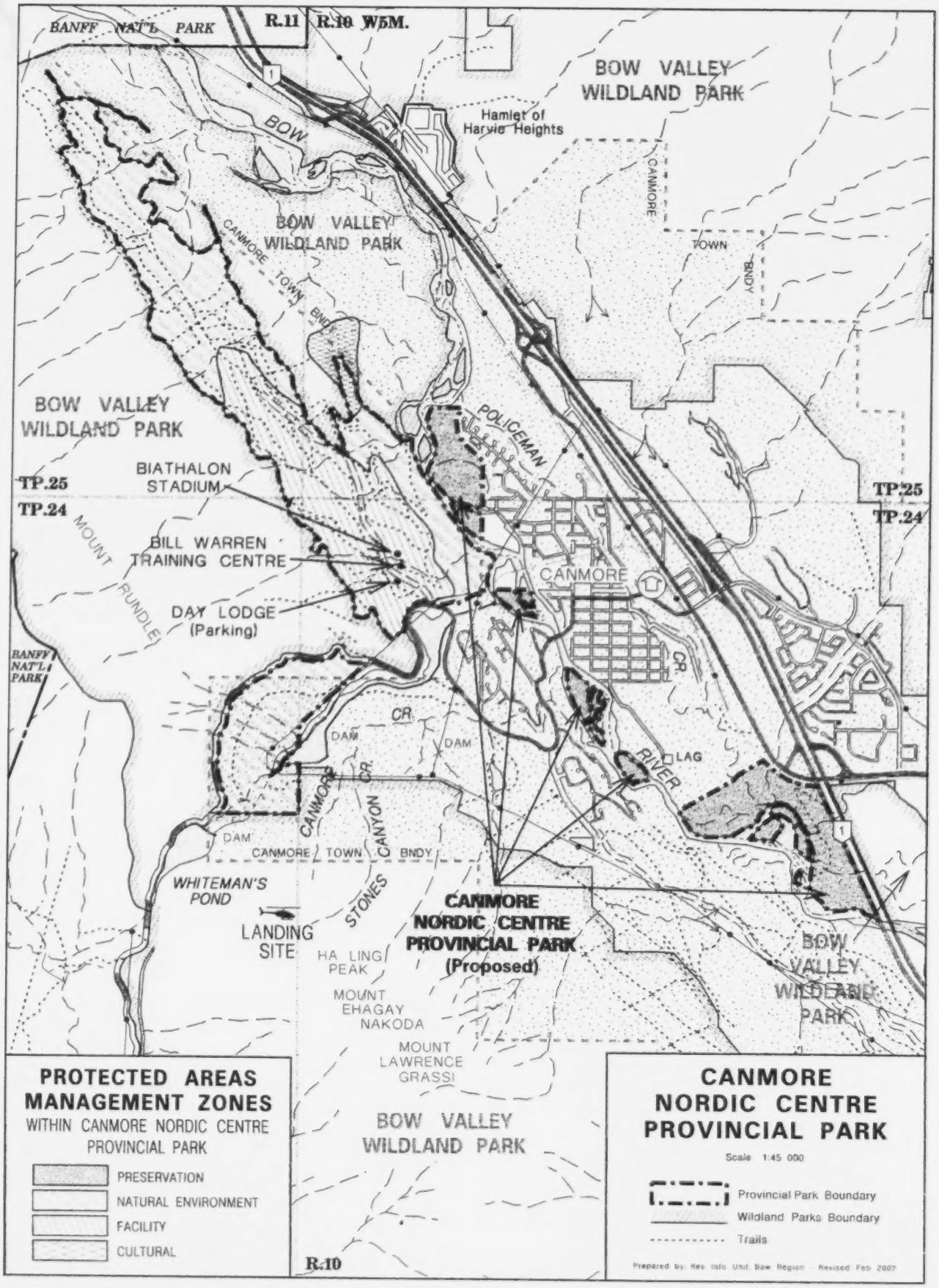
5.0 ZONING

The zones proposed for the Canmore Nordic Centre Provincial Park are **Facility, Natural Environment and Preservation**. See Map 6.

The **Facility zone** includes all parking, day lodge, Bill Warren Training Centre, stadium, team buildings, maintenance facilities as well as the most intensively used portion of the trails system with some 23 permanent bridges. It extends to the northwest end of the mine meadow. This zoning will accommodate maintenance of existing trails, bridges as well as expansion or upgrading of the trail system, utilities, stadium, team buildings, day lodge, parking and the Bill Warren Training Centre.

Beyond the mine meadow, the **Natural Environment zone** accommodates the maintenance and limited upgrading or expansion of existing trails subject to an analysis of the impacts on wildlife movement and habitat use. The Grassi Lakes portion of the park is also zoned as Natural Environment to permit maintenance, upgrading or minor expansion of the existing trail and related facilities as required. This will also accommodate activities such as hiking and rock climbing. While the areas around the rock paintings are too small to be zoned for preservation, a high priority will be placed on protecting them.

Preservation zoning will be applied to Canmore Nordic Centre Provincial Park lands within the important Bow River floodplain and riparian area. This will allow a high degree of habitat protection.


BANFF NAT'L PARK
R.11
R.10 W5M.
BOW VALLEY WILDLAND PARK
Hamlet of Harvie Heights
BOW
CANMORE TOWN BNDY
BOW VALLEY WILDLAND PARK
POLICEMAN
BOW VALLEY WILDLAND PARK
TP.25
TP.24
BIATHALON STADIUM
BILL WARREN TRAINING CENTRE
DAY LODGE (Parking)
MOUNT FUNDLE
CANMORE
CR.
DAM
LAG
RIVER
CANMORE CANYON
CANMORE TOWN BNDY
WHITEMAN'S POND
LANDING SITE
STONES
HA LING PEAK
MOUNT EHAGAY NAKODA
MOUNT LAWRENCE GRASSI
CANMORE NORDIC CENTRE PROVINCIAL PARK (Proposed)
BOW VALLEY WILDLAND PARK
R.10
PROTECTED AREAS MANAGEMENT ZONES
WITHIN CANMORE NORDIC CENTRE PROVINCIAL PARK
PRESERVATION
NATURAL ENVIRONMENT
FACILITY
CULTURAL
CANMORE NORDIC CENTRE PROVINCIAL PARK
Scale 1:45 000
Provincial Park Boundary
Wildland Parks Boundary
Trails
Prepared by: Res. Info. Unit, Bow Region - Revised Feb. 2002

Map 6

6.0 MANAGEMENT GUIDELINES

6.1 Outdoor Recreation

6.1.1 Facilities and Activities

Within the Facility Zone, expansion or upgrades to the day lodge, stadium, maintenance building, team rooms, trail system and biathlon facilities will be considered subject to Kananaskis Country Recreation Policy 1999, the Kananaskis Country Architectural Motif, as well as minimizing environmental impacts and conflicts with existing uses. No commercial overnight accommodation or motorized recreation activities will be permitted, however some small scale, new day use activities (e.g. tube hill, skating) may be. Alberta Community Development will consider expansions to the existing athlete-training Centre as long as its mandate is maintained. Overnight accommodation for athletes only may be considered. Staff at the Nordic Centre will continue to require parking and transportation plans from event organizers and will refer these to the Town of Canmore and the RCMP. Staff will also monitor overflow parking on SR 742 and explore ways to address associated safety concerns with Alberta Transportation. The snowmaking system will be expanded and upgraded as funding permits. Within the Natural Environment Zone, only trail re-routes, upgrades or limited new trails will be considered. No new development will be considered within the Georgetown Cultural Zone other than trail upgrading or improved or increased interpretive signage.

Those commercial and special events appropriate to the CNCPP setting and mandate will require a permit with conditions issued by Alberta Community Development. Effects of these events on neighbouring areas and uses will be considered.

The existing designated trail on the island in the Bow River adjacent to Larch Subdivision within the Town will be maintained. No additional trail facilities will be developed and use will not be encouraged on island portions of Canmore Nordic Centre Provincial Park. Limited future trail development may be considered on the portion immediately upstream of Highway 1 subject to minimizing environmental impacts and conflicts. Any trails in this portion will be planned and constructed jointly with the Town, stakeholders and the public.

6.2 Preservation

6.2.1 Vegetation

All wildfires will be actioned in Canmore Nordic Centre Provincial Park according to provincial wildfire suppression policy. Consideration will be given to a fuel modification program in the vicinity of the developed area to reduce the risk to structures and improve fire suppression efforts. As well, larger scale fuel reduction and fireguard projects, which also enhance wildlife habitat, will be considered for the north end of the park as part of the BCEAG "Bow Corridor Wildland/Urban Interface Plan".

Restricted and invasive weeds will be monitored and controlled as required consistent with provincial legislation. Broadcast spraying of herbicides will be kept to a minimum with spot herbicide or mechanical control being the options of choice wherever practical.

Reclamation and re-vegetation projects in the park will use native species only with a preference for transplanted local species where possible.

6.2.2 Aquatics

Maintaining the present water quality and quantity in Grassi Lakes will continue to be the objective. The potential for reintroducing native fish (cutthroat trout) will be evaluated.

Those islands and shore lands along the Bow River upstream of the Trans Canada Highway bridge that are part of the Canmore Nordic Centre Provincial Park will continue to be managed to protect aquatic and wildlife habitat.

6.2.3 Wildlife

Habitat values especially in the mixed aspen community above the stadium will be maintained and only limited additional trail development will be considered. Habitat enhancement opportunities will be explored in conjunction with the wildfire hazard reduction program. Wildlife/human conflicts that arise will be managed according to existing policies. Efforts to address such conflicts could include the active removal or relocation of Buffalo Berry along popular trails.

Enhancement and maintenance of a functional wildlife corridor connecting Canmore Nordic Centre Provincial Park and adjacent areas with the primary wildlife corridor on the southeast side of the Rundle Forebay is a priority. The province will work with the Town, Trans Alta and other stakeholders to address the need for a wildlife crossing structure on the Forebay. Monitoring of wildlife and human use in the wildlife corridors adjacent to Canmore Nordic Centre Provincial Park will be implemented and the results will influence ongoing management.

6.2.4 Cultural

The pictographs near Grassi Lakes will be protected and regularly monitored. The interpretive trail to Georgetown from the Nordic Centre Day Lodge will be maintained. The existing interpretive sign will be updated and, through a partnership with local history groups, off-site interpretation (some of which may be at the Nordic Centre) may be expanded. If additional sites are discovered they will be reported, assessed and protected or salvaged as appropriate.

6.3 Tourism

The Nordic Centre's role in the local and regional tourism economy will be maintained. The Centre will continue to liaise with tourism organizations and conduct select marketing and promotion. The Centre will remain highly accessible for a wide range of public recreation activities as well as maintain its role as an important educational, training and competition site.

6.4 Heritage Appreciation

6.4.1 Interpretation/Environmental Education

Interpretive signs require updating to reflect the new status of the park and uses in the area. There is potential for a few other interpretive signs commemorating the 1988 Winter Olympics and the park's role as a wildlife corridor and habitat patch.

The park will be used for environmental education as well as outdoor pursuits such as teaching cross-country skiing and mountain biking. These activities currently take place on a school-by-school basis in agreement with the Canmore Nordic Centre management. These activities will continue to be encouraged and teaching units may be developed that use parts of the park for both environmental education and outdoor skill development.

6.4.2 Visitor Information

The park is included as part of Kananaskis Country's "Explore" magazine and is a high profile tourist destination. A park brochure with trail map, general information, and safety information is updated on an annual basis. Several local tourism operators in conjunction with Canmore Nordic Centre management produce other publications that include the park. As well, the park is included as part of the Kananaskis Country web site.

7.0 DISPOSITIONS

The Calgary Olympic Development Association has a lease agreement with the province for the construction, maintenance and operation of the Bill Warren Training Centre. Amendments to this lease will only be considered following approval of modifications to the Training Centre (see Section 6.1.1). TransAlta Utilities has a power line easement that predates the Nordic Centre, which passes through the south end of the park. Periodic vehicle access for maintenance of this and related infrastructure will continue.

8.0 REGIONAL CO-ORDINATION

Plans for major events at the Nordic Centre will continue to be referred as appropriate to the R.C.M.P., Alberta Transportation, the Town of Canmore and others as required. In conjunction with these other agencies, Nordic Centre staff will develop more detailed written policies and guidelines for future major events.

BOW VALLEY PROVINCIAL PARK

1.0 INTRODUCTION

1.1 Background

Bow Valley Provincial Park was established in 1959 and enlarged in 1984, 1998 and 1999. Several small portions of the former Bow Flats Natural Area just upstream from the Park as well as six small Provincial Recreation Areas located along the Trans Canada and 1A Highways west of the park have been added as a result of this management planning process (see Map 7).

Located at the main gateway to the Canadian Rockies, the Park has high scenic, environmental and recreational values. It contains numerous glacial features such as eskers, drumlins, and meltwater depressions, unique springs and a high diversity of plant species including some that are rare or endangered. Important elk habitat and wildlife movement corridors in the Bow and Kananaskis valleys are also present. There are outstanding interpretive and other trail opportunities and provincially significant paddling opportunities below Barrier Dam on the Kananaskis River. The Park also contains the Barrier Lake Visitor Information Centre, one of two major visitor information centres in the Kananaskis Valley.

2.0 ROLE IN ALBERTA'S NETWORK OF PROTECTED AREAS

2.1 Contribution to Provincial Objectives

Bow Valley Provincial Park contains provincially significant natural landscapes and features. In addition to the special or significant features described in 1.1, it includes a range of recreation facilities along with interpretive and education programs that enhance opportunities for visitors to explore, understand, appreciate and respect the natural and cultural values found here.

2.2 Natural Region, Sub-region and Themes

The park is representative of the Montane Natural Region, one of Alberta's smallest and yet most biologically diverse and scenic. At least 15 Level 2 Natural History Themes are found here including Douglas fir, aspen and other forest types that are mixed with open grasslands as well as several ponds and springs.

3.0 OVERVIEW OF PROTECTED AREA

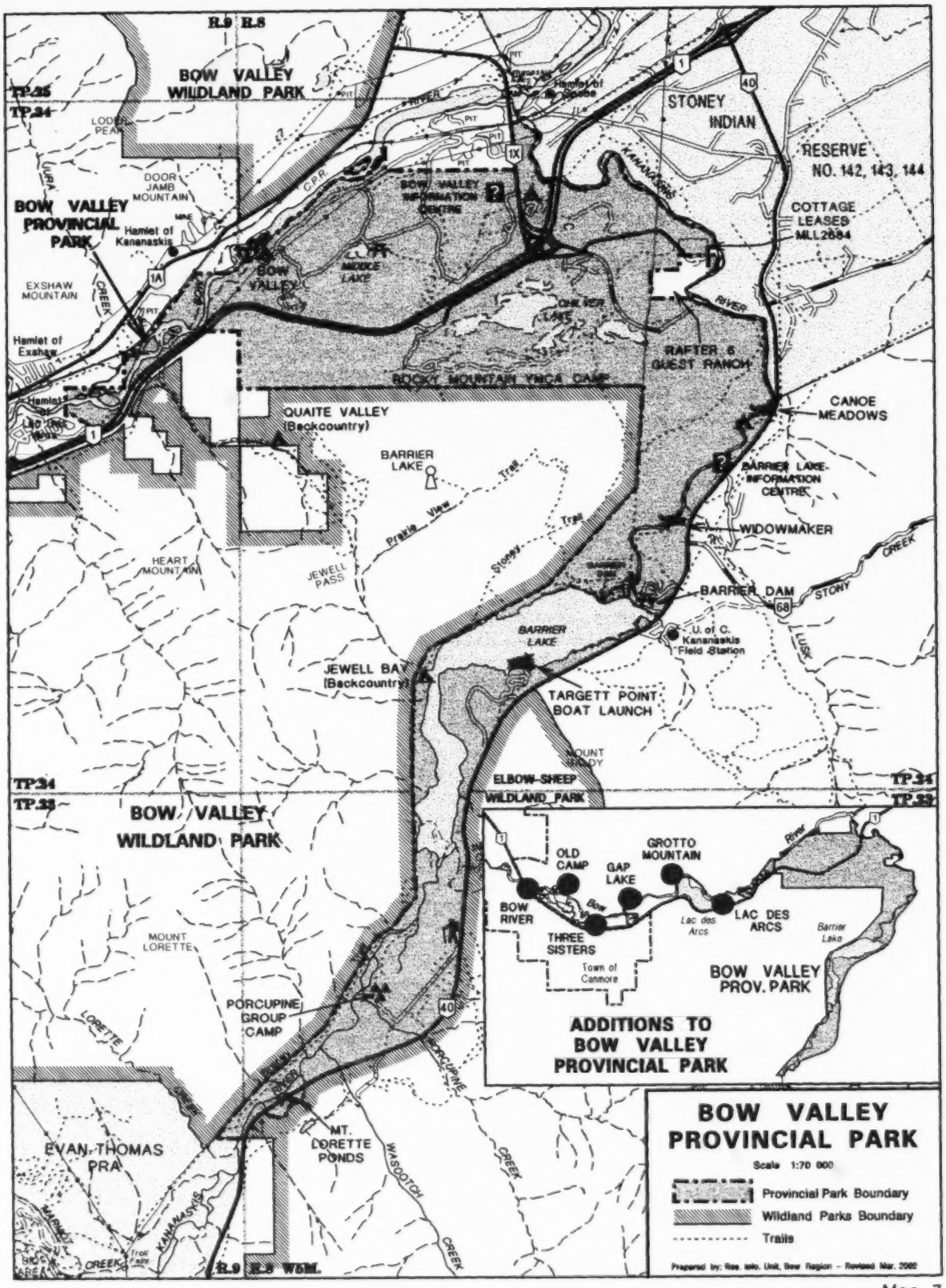
3.1 Regional Setting and Access

Bow Valley Provincial Park is approximately 80 kilometres west of Calgary on the Trans Canada Highway. It has an area of approximately 3200 hectares. It borders the easternmost slopes of the Rockies on its west and south boundary while the Kananaskis River forms most of the east boundary. It is bounded on the north by the Bow River and provincial Crown lands (see Map 7). The north part of the Park is relatively flat or undulating while the southern portion is valley bottomland. Elevations range from 1290 meters above sea level (asl) on the Bow River to 1400 meters asl. at the southern end of the Park.

3.2 Features

3.2.1 Geology/Landforms/Soils

Underlying bedrock is primarily Mississippian limestone and shale along with Devonian dolomite and sandstone. Predominant landforms within the park are glacial features such as morainal terraces, eskers


R.9 R.8
BOW VALLEY WILDLAND PARK
TP.35
TP.34
LODGE PEAK
DOOR JAMB MOUNTAIN
BOW VALLEY PROVINCIAL PARK
Hamlet of Kananaskis
EXSHAW MOUNTAIN
EXSHAW CREEK
Hamlet of Exshaw
BOW VALLEY
BOW VALLEY INFORMATION CENTRE
BOW RIVER
C.P.R.
PIT
MIDGE LAKE
CHILVER LAKE
ROCKY MOUNTAIN YMCA CAMP
QUAITE VALLEY (Backcountry)
BARRIER LAKE
Prairie View Trail
Stoney Trail
HEART MOUNTAIN
JEWELL PASS
JEWELL BAY (Backcountry)
BARRIER LAKE
TARGETT POINT BOAT LAUNCH
MOUNT SANDY
ELBOW-SHEEP WILDLAND PARK
TP.34
TP.33
BOW VALLEY WILDLAND PARK
MOUNT LORETTE
PORCUPINE GROUP CAMP
LORETTE CREEK
PORCUPINE CREEK
EVAN-THOMAS PRA
MT. LORETTE PONDS
WASOOTCH CREEK
KANANASKIS
MARMOT BROOK
TRAIL FALLS
R.9 R.8 W5M
STONEY INDIAN RESERVE NO. 142, 143, 144
KANANASKIS RIVER
COTTAGE LEASES MLL2884
RAFTER 6 GUEST RANCH
CANOE MEADOWS
BARRIER LAKE INFORMATION CENTRE
WIDOWMAKER
BARRIER DAM
STONEY CREEK
LUSK
U. of C. Kananaskis Field Station
OLD CAMP
GAP LAKE
GROTTO MOUNTAIN
BOW RIVER
THREE SISTERS
Lac des Arcs
LAC DES ARCS
Barrier Lake
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BOW VALLEY PROV. PARK
ADDITIONS TO BOW VALLEY PROVINCIAL PARK
BOW VALLEY PROVINCIAL PARK
Scale 1:70 000
Provincial Park Boundary
Wildland Parks Boundary
Trails
Prepared by: Rec. Info. Unit, Bow Region – Revised Mar. 2002

Map 7

and depressions. Bedrock exposures occur along the west end of the park as well as on the north and east shore of Barrier Lake. As well, shale and sandstones are exposed in the canyon terrain along the Kananaskis River below Barrier Dam. In the Kananaskis Valley portion of the park, valley bottom landforms include morainal and alluvial terraces as well as alluvial fans from tributary stream action. Loess (windblown silt and clay) deposits occur near Barrier Lake and on the east shore of Lac des Arcs.

Soils north of Barrier Lake are predominantly Regosols and Shallow Brunisols neutral to basic in pH (Greenlee, 1974). There is very little topsoil in this area while sands and gravel are abundant (Edwards, 1979, McGregor 1984). A thin layer of loess is found over most of the area with the thickness increasing near the Bow River.

Three small patches of lacustrine (silty clay loam) deposits are found along the south side of Chilver Lake.

Areas south and west of Barrier Lake along the Kananaskis River are dominated by Regosols with some Brunisols resulting from fluvial deposits. The large hill on the east side of Barrier Lake sees Grey Luvisols and Regosols overlaying morainal and colluvial deposits (McGregor 1984).

3.2.2 Aquatics

Water bodies within Bow Valley Provincial Park include the Bow River, Kananaskis River, Barrier Lake and several streams, small lakes or ponds. The Bow River contains primarily brown trout, brook trout and mountain whitefish. Other species present likely include rainbow trout, cutthroat trout, lake trout and bull trout. The Kananaskis River contains the same species, but in very much reduced numbers due to the extreme daily fluctuations in water flow below Barrier Lake Reservoir. Barrier Lake contains the same fish species, plus a very high density of suckers. The reservoir fluctuates greatly throughout the year, which limits the production of food and cover for fish. Alternatives are being investigated with TransAlta Utilities and other stakeholders to managing the Kananaskis River system including the Kananaskis Lakes with a view to improving aquatic and fish habitat.

Chilver Lake has reportedly sustained a small population of brook trout since the 1950s. The lake however is very shallow (greatest depth recorded is about 2 meters) and therefore is susceptible to winter kills.

3.2.3 Vegetation

The majority of Bow Valley Provincial Park lies within the montane subregion with only a small portion of the south end of the park extending into the Subalpine. Open forests mixed with grasslands characterize the Montane. Limber pine can be found on exposed outcrops in the southwest corner of the park. Douglas Fir and lodgepole pine can be found on upland sites while white spruce forests dominate stream banks, drainages and north facing slopes. Aspen are commonly found on terraces.

Bluebunch wheat grass, fescue grasses and oat grasses dominate the park's grasslands. Grasslands in the park also have a high dwarf shrub cover, with bearberry and creeping juniper common. (Biota Consultants, January 2000).

Several vegetation inventories have been completed for the Park including an Ecological Survey in 1972, a Vegetation Inventory of Bow Valley Provincial Park in 1988; and a Rare Plant Survey of Bow Valley Provincial Park in 1999. Several sites have been identified that contain unique, rare or endangered species. The Many Springs area and several other sites have a very diverse flora including some rare species. The impact of ongoing visitor activity on vegetation is a growing concern throughout the park.

3.2.4 Wildlife

Bow Valley Provincial Park is important in the regional system of identified habitat patches and wildlife corridors. Of particular importance is the movement corridor south into the Kananaskis Valley along the west side of Barrier Lake. A wintering population of 70 to 90 elk are dependent on the open grassland areas within the Park. Many of these same elk migrate south in the spring and summer to calve and spend the summer in the Kananaskis Valley. Collisions between elk and vehicles on the Trans Canada Highway are an ongoing concern. Deer, particularly white-tailed deer, are common within the park. Large carnivores (bears, cougars, and wolves) are occasionally observed within the park and use it periodically as part of their respective home ranges. Beavers are found in the park and have caused flooding in some portions. Bow Valley Provincial Park is also significant as the ranges of two species of amphibians (Long toed and Tiger salamanders) overlap here and both species occur in several ponds. Harlequin ducks, a species of concern due to long term declines in numbers, require careful management. They are known to nest and feed in high concentrations along the Kananaskis River above Barrier Lake.

3.2.5 Cultural

There is a bison kill site along the Bow River, immediately adjacent to the Trans Canada Highway at the rock cut. It is subject to ongoing erosion and has been partially excavated. There are many other archaeological sites within the park, which are hard to detect, and not well known and thus have a low potential for disturbance or damage. A sundance lodge was located in Bow Valley south several years ago and neighbouring Nakoda people from time to time may use this site. Existing interpretive materials and programs address the cultural history of the park and region.

3.2.6 Existing Facilities

Due to its location on the Trans-Canada Highway and Highway 40 and the short travel time from Calgary and Canmore, the park serves both ovemight and day users. The main park office and visitor centre is located north of the Trans Canada and close to Highway 1X.

Two vehicle access campgrounds (Bow Valley and Willow Rock) provide a total of 293 sites and four group camps (Grouse, Owl, Canoe Meadows and Porcupine) have 108 RV units and 120 tent sites. In addition, there are 92 camping sites provided at Lac des Arcs, Three Sisters and Bow River campgrounds along the Trans Canada Highway. One backcountry campground (Jewell Bay) is located on west side of Barrier Lake. It accommodates hikers, horse riders, canoeists and mountain bikers and is operated on a reservation basis between June 15 and September 30. An informal group use area is located at the Broken Bridges site on the Kananaskis River.

The northerly portion of the park contains six public day use sites (Whitefish, Many Springs, Elk Flats, Middle Lake, Park Administration Building, and Bow Valley South) for picnicking, fishing, interpretive walks or trails related activities. In the Kananaskis Valley, there are seven day use sites (Canoe Meadows, Barrier Lake Information Centre, Widowmaker, Barrier Dam, Barrier Lake, Baldy Pass and Mt. Lorette Ponds) for paddling, rafting, picnicking, fishing, hiking, mountain biking, boat launching and interpretive walks. As well, there are three day use sites along Highway 1A providing trails, picnic, fishing and other opportunities.

There are five short interpretive trails in the northerly portion of the park as well as a 4.5 km paved bicycle path that connects the Park Administration building with Bow River campground. To the west of the Park, Grotto Canyon trail is also popular. Canoe Meadows, Barrier Lake Information Centre and Widowmaker sites are connected by a 2.2km hiking trail along the Kananaskis River. Barrier Dam is an important trailhead for hikers and mountain bikers travelling to the nearby Prairie View and Stoney Trails and also provides picnicking opportunities. At the nearby Barrier Lake Day Use area, there is a boat launch, picnic facilities and a short interpretive trail. The potential for developing small scale fixed roof accommodation has been identified here. Baldy Pass trailhead is also located in Bow Valley Provincial Park (see Map 7)

although the trail itself is located in the adjacent Elbow Sheep Wildland Park to the east. Mt. Lorette day use area provides universal access facilities for pond fishing, picnicking and a short interpretive trail.

The park also includes the long standing Rocky Mountain YMCA Camp Chief Hector near its south boundary. Rafter Six Guest Ranch is outside the east boundary of the Park.

Facility related management issues to be addressed in Bow Valley Provincial Park include reducing the effects of recreational activities on important elk wintering range and significant grassland vegetation as well as managing the effects of beaver activities at Willow Rock Campground, Many Springs and the Flowing Waters Interpretive Trail. The Widowmaker and Canoe Meadows facilities are very significant provincially and locally for teaching, training, competition, recreational paddling and commercial rafting. Management concerns include congestion in parking areas, allocation of commercial and non-commercial use on the various sections of the river, maintaining safety and aesthetics.

3.2.7 Staff Housing

Staff accommodations consist of seven older houses, two trailers, three bunkhouses and a diner. All facilities are older and in need of substantial ongoing maintenance, upgrading or replacement.

3.2.8 Visitor Use

Camping use at Bow Valley Provincial Park has averaged around 12,000 campsite nights (the total number of campsites occupied annually) over the last ten years with an increase to 16,000 during 1998-99, the last year for which figures are available. As elsewhere, camping levels fluctuate significantly with weather. Bow Valley Provincial Park has several group camp facilities including one that, in the past, has been used for very large group events (Boy Scouts etc.). Aside from those unusual events, group use has averaged about 500 group campsite nights annually over the last ten years. At Canoe Meadows, camping primarily by paddling groups has averaged around 300 group nights annually while Porcupine Group Camp has seen 275 group nights per year.

Reliable use figures for individual day use areas or the Park as a whole are not available. A significant amount of day hiking, some mountain biking and equestrian use occurs mainly on designated trails within the park. Significant numbers of paddlers use the Lower Kananaskis River and a lesser number use the Bow River. A review of cumulative figures for all sites in the Bow Valley including Bow Valley Provincial Park over the last ten years reveals an average of 105,000 party visits per year but range from 65,000 (1989-90) to 202,000 (1996-97). Available estimates suggest an increasing level of day use, and field staff observations support this. Increases especially in numbers of paddlers on the Kananaskis and Bow Rivers, and mountain bikers on Prairie View and Stoney trails have been observed. Given the provincially significant paddling opportunities on the Kananaskis River, the growth in Calgary and Canmore populations as well as the excellent road access and short travel times, increased levels of both overnight and day use are expected for all activities in the park along with the resulting increased potential for impacts and conflicts.

A variety of special events and filming activity also occur in the Park.

3.3 Dispositions

The YMCA's Camp Chief Hector, located in the southern portion of the park has a long-standing lease and provides year round outdoor education and recreational activities for youth. An 8-acre parcel of private land is surrounded by the lease area. While much of the camp activities occur on the lease, many off site trips by youth groups occur for day and overnight purposes. The Rafter Six Ranch Resort has a horse-grazing permit on 135 acres of lands in Bow Valley south. As well, the Ranch holds a recreational lease for equestrian activity on park lands. Close to the Rafter Six but within Bow Valley Provincial Park boundaries, is a lease for 4 summer cottages. Six easements and one LOC for power line "rights of way" exist and are held by Utilicorp and TransAlta Utilities. TransAlta also holds a clay pit disposition at Barrier Dam and a water development license for an area that includes Barrier Dam and the associated power

generating station. Atco Gas and Pipelines holds two dispositions for a natural gas pipeline servicing Canmore and Banff, which crosses small sections of park land adjacent to the Trans Canada Highway right of way. Alberta Sustainable Resource Development, Forest Management Division has two small dispositions for research plots within the Kananaskis Valley portion of the park near Baldy Pass trailhead.

3.4 Adjacent Land Use

A number of recreational, commercial, industrial and municipal/residential land uses occur on land adjacent to Bow Valley Provincial Park and affect its management. For example, the Bow Valley and Elbow Sheep Wildland parks border the Park on the south, west, and east and are used for a variety of extensive recreational purposes. The Bow River on the north side of the park is used for fishing, canoeing and commercial river guiding/rafting and boating tours, which make occasional use of the park as an egress point. The Canadian Pacific Railway and the Highway 1X run along the north and east sides of the park. Lafarge Canada operates a shale quarry and gravel pit bordering the north side of the park In the Kananaskis Valley portion, the Kananaskis River or Highway 40 forms the east boundary of the park. The Stoney Indian Reserve occupies lands to the east of the park. Adjacent to the east boundary of Bow Valley South, the Rafter Six Ranch Resort provides tourist accommodation and services including trail-riding opportunities on park lands. Further south, near the junction of Highways 68 and 40, the Tim Horton's Childrens Ranch operates as a summer camp facility for children. Some of its activities use park facilities. A short distance further south near Barrier Dam is the University of Calgary Field Station. The Field Station runs environmentally oriented educational programs for undergraduate and graduate students as well as short programs for primary and secondary school children from Calgary and surrounding areas. Some of these occur in the park south of Barrier Dam.

The Trans Canada Highway right of way runs east/west through parts of the park.

4.0 MANAGEMENT INTENT AND OBJECTIVES

The **management intent** for Bow Valley Provincial Park is:

To provide opportunities for heritage appreciation, outdoor recreation, and tourism or for any combination of those purposes, which are dependent on and compatible with the protection of the environment.

The **management objectives** in order of priority are:

Preservation

To preserve or enhance aquatic, riparian and terrestrial habitats especially critical elk range, movement corridors as well as rare or uncommon plants and ensure that ecological processes are maintained.

Heritage Appreciation

To provide opportunities for visitors to experience, understand and appreciate the natural heritage values of the park.

Outdoor Recreation

To provide opportunities for recreational uses such as vehicle access camping, hiking, mountain biking, river paddling and fishing.

Heritage Tourism

To provide opportunities and infrastructure for visitors to experience and enjoy the natural and cultural heritage of the park.

5.0 ZONING

Preservation, Natural Environment, Facility and **Cultural** zones are proposed for Bow Valley provincial park. (see Map 8).

A **Preservation** zone has been applied to that portion of the elk movement corridor along the west side of the Kananaskis River that is within Bow Valley Provincial Park and the adjacent wildland park. This accommodates the spring movements of the local population of elk. Recreational access will be restricted to use of the Stoney and Prairie View Trails during the period April 15 to June 15. No use of Jewell Bay backcountry campsite and no use of the Stoney Trail south of Jewell Bay trail junction will be allowed during this period. Current uses of this preservation zone outside of this restricted period will not be affected. Use of Jewell Bay campground will be maintained but no random camping will be permitted within one kilometre. Preservation zoning has also been applied to those lands formerly designated as Bow Flats Natural Area, upstream of Bow Valley Provincial Park. This reflects their importance as riparian habitat and location within the river floodplain. No facility development will occur here.

The **Natural Environment** zone covers the majority of the park. It accommodates existing trails and day use opportunities as well as the upgrading or expansion of these facilities. No new facilities other than non-motorized trails are currently anticipated within this zone.

Facility zones include campgrounds, day use sites as well as maintenance, administration, staff housing, information, interpretive and related facilities. These zones will accommodate ongoing operations as well as any future upgrading or expansion. The facility zone at Barrier Day Use will allow future overnight accommodation development as identified in the Kananaskis Country Recreation Policy 1999. Development could consist of fixed roof, camping, restaurants and day use components. Facility zones also cover all of the former provincial recreation facilities (Lac des Arcs, Three Sisters, Bow River, Old Camp, Gap Lake, Grotto Mountain Pond) which have been added to Bow Valley Provincial Park and where only upgrading or minor expansion is anticipated.

One small **Cultural** zone has been applied in Bow Valley south to a sundance site.

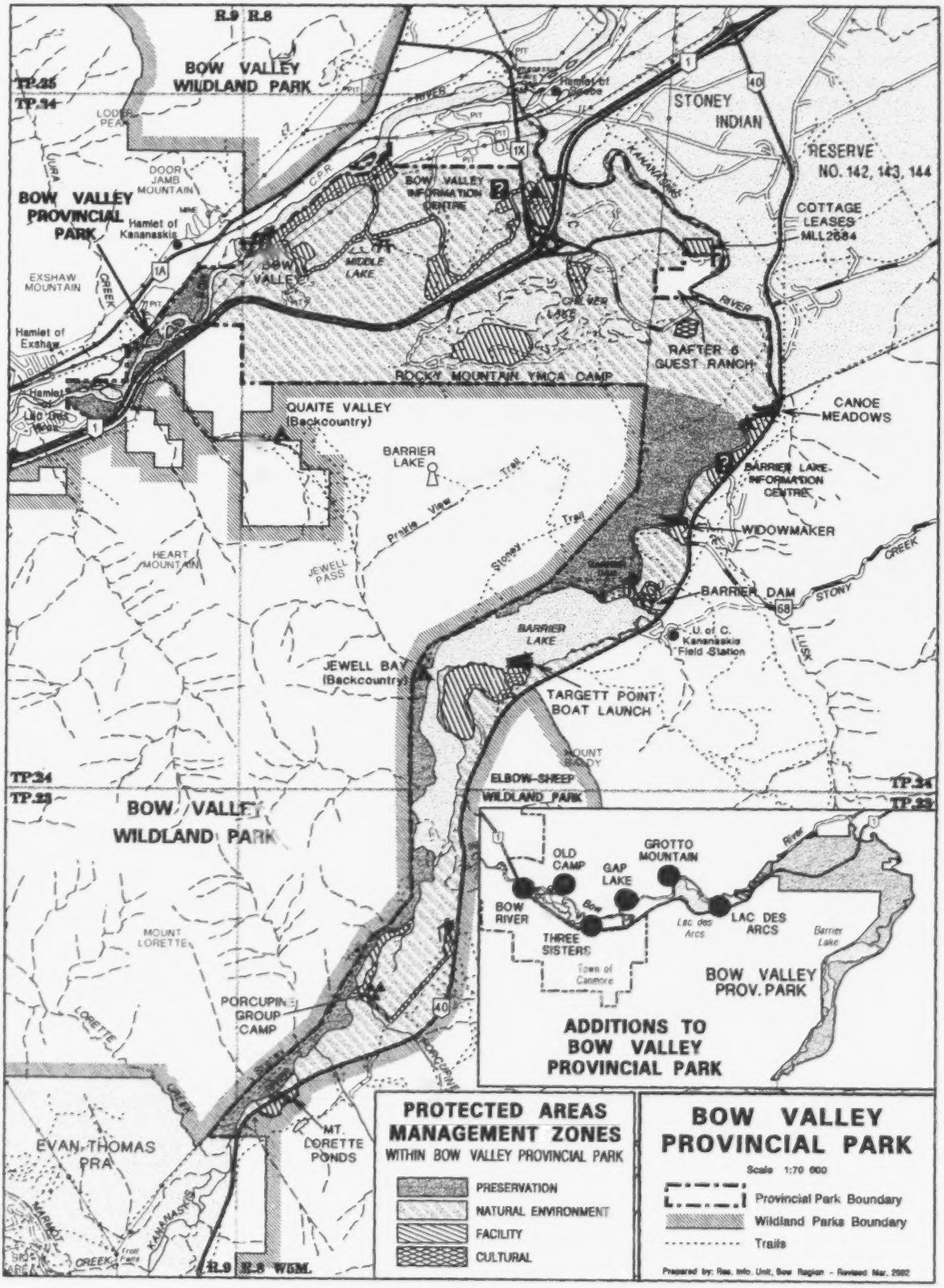
6.0 MANAGEMENT GUIDELINES

6.1 Preservation

6.1.1 Geological/Landforms

As the active floodplain of the Bow River continues to evolve, flood or erosion protection measures in place along the Bow River within the park will be maintained. Future proposals for protection of park facilities, highway or railway will be reviewed with a view to minimizing negative impacts on the park and on the Bow River.

The former gravel pit near the west end of the park has been reclaimed. No other quarrying or borrow pit development will be permitted within the park. However, salvage of materials in sites to be disturbed by approved development will be considered.


R.9 R.8
BOW VALLEY WILDLAND PARK
TP.25
TP.24
LODGE PEAK
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Hamlet of Exshaw
Hamlet of Lac des Arcs
BOW VALLEY
MIDDLE LAKE
BOW VALLEY INFORMATION CENTRE
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KANANASKIS RIVER
STONEY INDIAN RESERVE NO. 142, 143, 144
COTTAGE LEASES MLL2684
CHESTER LAKE
RAFTER 6 GUEST RANCH
ROCKY MOUNTAIN YMCA CAMP
QUAITE VALLEY (Backcountry)
CANOE MEADOWS
BARRIER LAKE
Prairie View Trail
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R.9 R.8 W5M.
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NATURAL ENVIRONMENT
FACILITY
CULTURAL
BOW VALLEY PROVINCIAL PARK
Scale 1:70 000
Provincial Park Boundary
Wildland Parks Boundary
Trails
Prepared by: Res. Info. Unit, Bow Region - Revised Mar. 2002

Map 8

6.1.2 Aquatics

The Many Springs area will be managed so as to maintain or enhance the natural values.

In order to protect the provincially significant breeding population of Harlequin Ducks along the Kananaskis River above Barrier Dam, no further facility development will occur and there will be no encouragement of paddling activities here.

No facilities will be developed and use will not be encouraged in those riparian additions to the park that were formerly part of Bow Flats Natural Area.

Further stocking of fish in Chilver Lake will not occur because of the risk of winter kill. This lake and others in the vicinity will be managed for waterfowl and amphibian habitat while allowing for the current kinds and levels of recreational use.

6.1.3 Vegetation

A vegetation management plan for the Many Springs area will be developed to protect the high diversity of plant species as well as rare and endangered species found in this area. A variety of measures including site design and visitor information and interpretation will be used to minimize impacts. In order to protect the significant grassland portions of Bow Valley South, group camping will be restricted to the two existing developed group campsites. Existing roads, power lines and buildings not required to support the group camps will be removed and the site reclaimed. Existing vegetation inventory and assessment work will continue as resources permit.

While wildfire is considered a natural disturbance process in Alberta, it is highly unpredictable and catastrophic wildfire may threaten human safety and facility development. Consequently all wildfires will be actioned according to provincial wildfire suppression policy in Bow Valley Provincial Park. Prescribed fire and selective logging may be used to simulate natural disturbance where appropriate.

Fuel modification programs may be used around developed facilities to reduce the risk of catastrophic fire and to improve fire suppression efforts by thinning the canopy and reducing ladder fuels. Periodic assessments will be done to identify the need for fuel modification projects. All such major vegetation modification projects will require that a plan be developed and approved prior to any work commencing. Other park values will be considered in such plans.

Forest insects and diseases that threaten adjacent resource values may be controlled to prevent the spread of the infestation to areas at risk. Forest insects and diseases will be monitored and control techniques that cause the least amount of disturbance will be used to minimize the threat to adjacent values.

As plant communities mature, some populations of wildlife may be reduced or eliminated due to changes in habitat suitability. Habitat enhancement may be undertaken by the department to ensure the presence of certain early to mid successional plant communities.

Restricted and invasive weed species will be monitored and controlled as required by provincial legislation. The use of herbicides will be kept to a minimum with mechanical control being the option of choice where practical. Broadcast spraying of herbicides will not be permitted in Bow Valley Provincial Park.

Reclamation and revegetation of disturbed sites within the park will use native species only with a preference for transplanted local species where possible.

Grazing of horses in Bow Valley Provincial Park will be limited to the existing grazing permit. This permit will be reviewed annually to determine its impact on the site and determine if amendments are required.

6.1.4 Wildlife

Preservation of the grassland areas within the park for wintering elk and deer will remain a high priority, as will be the protection of the movement corridor into the Kananaskis Valley. Monitoring of the elk population will continue and area closures in Bow Valley south may be necessary during elk calving periods. Recreational use of the preservation zone in the Kananaskis Valley (see Map 8) will be restricted from April 15 to June 15 to reduce disturbances to migrating elk.

Salamanders will be protected by limiting future development or changes within the park that affect their habitat. Staff will also work with neighbouring disposition holders to reduce or eliminate undesirable changes in amphibian habitat within the park. As research indicates a need for further protective or mitigative measures, they will be considered and implemented where shown to be necessary.

In exceptional circumstances, if natural features of the park (or if adjacent land, resources or facilities) are threatened, it may be necessary to implement a population control program for specific wildlife species. The significance of the threat and the need for mitigative measures will be evaluated. Species reintroduction would only be considered on a case-by-case basis.

6.1.5 Cultural

Most known archaeological sites in the park will not be identified to the general public. Monitoring of their condition will occur but no special protective measures will be taken at this time. The sundance site in Bow Valley south will be zoned Cultural and public access limited. On-site signage will inform random users of the nature of the feature and appropriate visitor protocols. Use of Bow Valley south for ceremonial purposes will be permitted under appropriate conditions. Staff will co-operate with staff from Alberta Community Development Historic Sites in monitoring all known archaeological sites, providing information and protective measures where necessary and researching potential new sites.

6.2 Heritage Appreciation

6.2.1 Interpretation / Environmental Education

A high level of personal interpretive services will be offered during the summer at Bow Valley Campground and at Willow Rock Campground. Interpretive presentation topics will include management concerns, safety, natural and cultural history and personal responsibility for protection of the environment. Interpretive signs and/or exhibits will be used to increase visitor awareness of the natural and cultural history of the area.

Local and regional schools will continue to be provided with park information including the proper use of the area for educational purposes. Workshops to formal and community educators continue to be offered. Teaching units may be developed that use specific part of the park as education sites.

6.2.2 Visitor Information

Visitor information will be provided at the Barrier Lake and Bow Valley Visitor Centres. It will include wildlife-people conflict prevention, safety, facilities, natural history, and recreational opportunity information. The park will be included in the Kananaskis Country "Explore" magazine as a featured tourist location. The park is included as part of the Kananaskis Country web site.

6.3 Outdoor Recreation/Tourism

6.3.1 Access/Staging Areas

Maintenance and minor upgrading of existing roads and parking areas will be done as required. No new roads are anticipated other than access to the potential facility node at the Barrier Day Use. Staff will continue working with the Lower Kananaskis River Users Association to manage access at Widowmaker, Canoe Meadows and Barrier Lake Visitor Centre sites. No additional day use areas or staging areas will be developed at Bow Valley south.

6.3.2 Trails

Existing trails will be maintained and upgraded as required. Mountain bike and equestrian use will only be permitted on designated trails or routes in Bow Valley Provincial Park to maintain user safety and enjoyment. Staff will continue to work with trail users to address impacts or conflicts as they arise. No new designated trails will be developed within Bow Valley Provincial Park at this time.

A spring closure (April 15th to June 15th) will be implemented for the Stoney Trail south of Jewell Bay backcountry campsite. When this or other trail use restrictions are in place, staff will suggest other alternatives. Within the preservation zone on Map 8, during the closure period, trail use to the north of the Jewell Bay campground will be restricted to the Stoney, Jewell Pass and Prairie View trails. No off trail use will be permitted.

6.3.3 Camping

Existing auto access camping facilities will be maintained and upgraded, as required but no further expansion of existing campgrounds will be considered within Bow Valley Provincial Park. Group Camp numbers and special events in the area south of the Trans Canada Highway will be limited to the existing capacities of the Owl and Grouse group camps (total of 60 RV and 60 tent sites) and the Stoney Trailhead. Buildings and other improvements not required for the operation of the two remaining group camps will be removed and the area reclaimed including roads, power lines and water treatment plant. Use of the Broken Bridge site will continue on a permit basis.

6.3.4 Commercial/Special Events

All commercial and special events within the park will require a permit and will normally be directed to the two Bow Valley south group campsites. Together, these can accommodate up to 120 camping units. Larger groups will be directed to other locations. All commercial and instructional groups using the Kananaskis River below Barrier Dam will require a permit issued by Alberta Community Development. Decisions on the allocation of commercial and instructional permits at these sites will be made by Alberta Community Development in consultation with the Lower Kananaskis River Users Association. The expansion of existing facilities at Widowmaker, Barrier Lake Information Centre, and Canoe Meadows day use areas will be considered to meet the needs of the public, commercial and non-commercial users of the Lower Kananaskis River.

No special events south of the Trans-Canada highway and west of the Kananaskis River and outside the designated group camps will be permitted between April 15th and June 15th to protect elk calving.

6.3.5 Other Recreational Activities

Trail hiking, bird watching, photography, fishing, snowshoeing, and mountain biking will continue. Rafting, kayaking and canoeing on the Kananaskis River below Barrier Dam will be addressed in consultation with the Lower Kananaskis River Users Group.

6.3.6 Barrier Lake Facility Node

The Kananaskis Country Recreation Policy 1999 identified a site for future small scale (less than 15,000 square feet) overnight accommodation, restaurant and day use facility development at Barrier Lake Day Use area (see Map 8). This would complement the existing day use facilities and a high degree of public access will be maintained. The site is scenic, has existing road access and day use facilities (including parking for 50 vehicles, a boat launch ramp, picnic tables, interpretive trails, toilets, garbage containers and water). This development will be solicited through a Call for Proposals that will consider environmental, economic, social and aesthetic factors. The boundary of this facility zone will be finalized once a development plan for the site is approved.

6.3.7 Staff Housing

Current staff housing will be maintained, upgraded or replaced as required.

7.0 DISPOSITIONS

Existing dispositions will be honoured and staff will work with the disposition holders to address concerns about impacts or conflicts as they arise. Expansion of existing facilities at the YMCA camp will be considered if it is consistent with the existing purpose of this lease and the provisions of this plan. New dispositions will only be considered that are consistent with the provisions of this park management plan and the Kananaskis Country Recreation Policy 1999. No new cottage leases and no new grazing permits will be issued. The grazing permit in Bow Valley south will only be renewed to a maximum of 1150 horse days annually.

8.0 ADJACENT LAND USE

Staff will maintain an effective working relationship with Alberta Transportation and its maintenance contractors with a view to reducing the number of wildlife vehicle collisions on the Trans Canada Highway and Highway 1X adjacent to the park.

Any application to develop the subsurface mineral lease outside the southwest corner of the park will be reviewed for consistency with the current guidelines in the Bow Corridor Integrated Resource Plan.

LIST OF REFERENCES

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APPENDICES

A. Alberta Protected Area Classification (excerpt from Management Plan Format: Provincial Parks, Wildland Parks, Recreation Sites, Wayside and Access sites, Wilderness Areas, Natural Areas; November 1996, Alberta Environmental Protection).

Wildland Provincial Park: established under the Provincial Parks Act; generally large areas of undeveloped land retaining their natural character. Human developments and interference with natural processes are kept to a minimum.

Provincial Park: established under the Provincial Parks Act; intended to protect provincially significant natural, historical, and cultural landscapes and features while providing quality recreational and educational experiences.

B. Alberta's Protected Area Zoning Framework (excerpts from "Management Plan Format: Provincial Parks, Wildland Parks, Recreation Areas, Wayside and Access Sites, Wilderness Areas, Natural Areas; November 1996; Alberta Environmental Protection)

Classification recognizes those individual sites within Alberta's overall network of recreation and preservation lands contribute in varying degrees to preservation, outdoor recreation, heritage appreciation, and tourism. Classification however, does not account for the variability of natural resources within a given site. All lands within a given site may not be of equal value from a preservation point of view, and all resources may not have equal capability from a regional perspective. Various components of our natural heritage require different management strategies if they are to be sustained over time.

Zoning spatially identifies areas according to their resource values and the types and levels of use and development that can be supported while fulfilling the objectives of the site as determined by its classification. Zoning is applied during management planning. Zoning takes into consideration the natural resources values and the stated objectives for preservation, outdoor recreation, heritage appreciation, and tourism. Zoning can also account for existing commitments that are to be honored as a condition of site establishment.

The zoning scheme used for Alberta's network of recreation and preservation land includes seven zones. Within the zoning framework sub-zones may be used where a greater sophistication of resource management is warranted. Each zone possesses distinct objectives and an identifiable role. The zones help to ensure a balance between resource protection and use.

The zones used in the Bow Valley protected areas are:

ZONES	INTENT
NATURAL ENVIRONMENT	- intended to preserve features, processes, habitat while providing high quality recreation and interpretation experiences in natural landscapes. - facilities normally limited to trails and backcountry campsites
FACILITY	- accommodates major facility developments (campgrounds, golf courses, hotels, ski hills, hostels)
WILDLAND	- large areas of natural landscape capable of providing non motorized wilderness recreational experiences. - facilities limited to trails, backcountry campsites. - guidelines to protect features or habitat values may be prescribed.
HISTORICAL/ CULTURAL	- intended to preserve archaeological or historical features
PRESERVATION	- provides highest degree of protection - very limited access and use

* Above zoning descriptions are intended to be illustrative only.

C. NATURAL HISTORY THEMES FOUND IN BOW VALLEY PROTECTED AREAS- PRELIMINARY ASSESSMENT

MONTANE SUBREGION

Level 1 themes	Level 2	BVWP	CNCPP	BVPP
Valley/Ridge Floor/stream	outwash fluvial glaciofluvial	✓		
	lacustrine			✓
	springs/seepage	✓	✓	✓
	spruce forest	✓	✓	✓
	lodgepole	✓	✓	✓
	aspen forest	✓	✓	✓
	balsam forest	✓		
	shrublands	✓	✓	
	grassland	✓	✓	✓
	river	✓	✓	✓
Ridge/valley wall				
	Douglas fir forest	✓		✓
	spruce forest	✓	✓	✓
	lodgepole	✓	✓	✓
	aspen	✓		✓
	grassland			✓
	moraine	✓		✓
	bedrock	✓		
	colluvium	✓		✓
Wetland Mineral				
	spruce forest	✓		
	deciduous	✓		✓
	shrubland	✓		✓
	marsh	✓		

		SUBALPINE	SUBREGION	
Valley Ridge/ Floor/stream	outwash fluvial	✓		✓
	moraine	✓	✓	✓
	spruce forest	✓	✓	✓
	old growth	✓	✓	✓
	lodgepole forest	✓	✓	✓
	grasslands	✓		✓
Ridge/valley wall				
	Front Ranges		✓	✓
	non-calcareous bedrock	✓	✓	
	calcareous	✓	✓	✓
	colluvial	✓	✓	✓
	morainal	✓	✓	✓
	avalanche	✓	✓	
	timberline/krumholz	✓		
	lower subalpine	✓	✓	✓
	upper subalpine	✓		
	spruce-fir	✓	✓	✓
	old growth	✓	✓	✓
	lodgepole	✓	✓	✓
	whitebark pine	✓		
	subalpine larch	✓		

Level 1 themes	Level 2	BVWP	CNCPP	BVPP
	deciduous	✓	✓	
	grass/meadow			✓
Wetland Mineral				
	coniferous	✓	✓	
	lake	✓		
Special				
	McConnell Thrust	✓		✓
	ALPINE	SUBREGION		
Valley ridge/ floor stream	morainal			
	colluvial	✓		
	moderate snowbed communities	✓		
	deep snowbed	✓		
	stream	✓		
Ridge/valley wall		✓		
	bedrock noncalcareous	✓		
	bedrock calcareous	✓		
	alpine glaciation	✓		
	morainal	✓		
	colluvial	✓		
	shallow snowbed communities	✓		
	moderate snowbed communities	✓		
	deep snowbed communities	✓		
	moist meadows	✓		
	snowfield	✓		
	Wet meadow	✓		
	lake	✓		

D. List of Dispositions in Bow Valley Protected Areas

a. Bow Valley Wildland Park

LOC 1208	Access Road 381710 Alberta Ltd.
LOC 881198	Access Road Rogers Cantel
LOC 820946	Rip Rap Town of Canmore
LOC 910549	Water Intake Three Sisters Resorts
LOC 881199	Access Road Rogers Cantel
LOC 760093	Access Road TransAlta Utilities
LOC 971268	Stream Training Town of Canmore
EZE 810114	Powerline TransAlta Utilities
EZE 2619	Powerline TransAlta Utilities
EZE 1707	Powerline TransAlta Utilities
EZE 1558	Powerline TransAlta Utilities
EZE 990114	Stream Training Town of Canmore
DRS 820114	Research plots Alberta Community Development
WDL 820005	Water Power Production TransAlta Utilities
MLL 860166	Tower Site TV West Inc.
MLL 760086	Tower Site CBC
MLL 880148	Tower Site Rogers Cantel
MLL 760033	Reflector Site TransAlta Utilities
MLL 860259	Tower Site TV West Inc.
MLL 870003	Tower Site TransAlta Utilities
MLL 1421	Climbing School Allan Derbyshire
MLL 860082	Four Season Resort Kan-Can Resorts Ltd.

Future Commitment Water Reservoir Two Town of Canmore
Future Commitment Water Reservoir Three Town of Canmore
Future Commitment Upgrade Historic Dam Three Sisters Resorts
Future Commitment Emergency Access Three Sisters Resorts

b. Former Bow Flats Natural Area (now part of Bow Valley Wildland Park)

LOC 137	TransAlta Utilities
EZE 2613	TransAlta Utilities
REC 860024	Boy Scouts
LOC 860714	Boy Scouts
EZE 860173	Baymag Mines
PLA 930561	Atco Gas
LOC 860426	Municipal District of Bighorn
REC 960009	Town of Canmore
GRP 790005	Walter Morris
LOC 8304465	Burnco Rock Products
MLL 910233	James Craig
GRP 787391	Canmore Ranch stables (small part of lease within BFNA)
EZE 940226	Town of Canmore
LOC 810849	Town of Canmore

c. Former Yamnuska Natural Area (designated as part of Bow Valley Wildland Park)

EZE 810114	TransAlta Utilities
LOC 404	TransAlta Utilities
DRS 810129	Alberta Transportation
GRP 787383	Kananaskis Ranch Ltd.
DRS	Lafarge (will continue to be administered by Land and Forest Service)

LOC	Lafarge (will continue to be administered by Land and Forest Service)
LOC 861083	Bow Valley Waste Management Commission

d. Bow Valley Provincial Park

ATCO gas pipeline
TransAlta power line
Rafter Six Grazing Permit
Rafter Six Grazing Lease
YMCA Youth Camp lease
TransAlta Barrier Dam/Water Licence
LFS Research plots